No. 2918.2

United States

Circuit Court of Appeals,

FOR THE NINTH CIRCUIT.

Union Tool Company,

Appellant,

Appellee.

Elihu C. Wilson,

APPELLANT'S OPENING BRIEF.

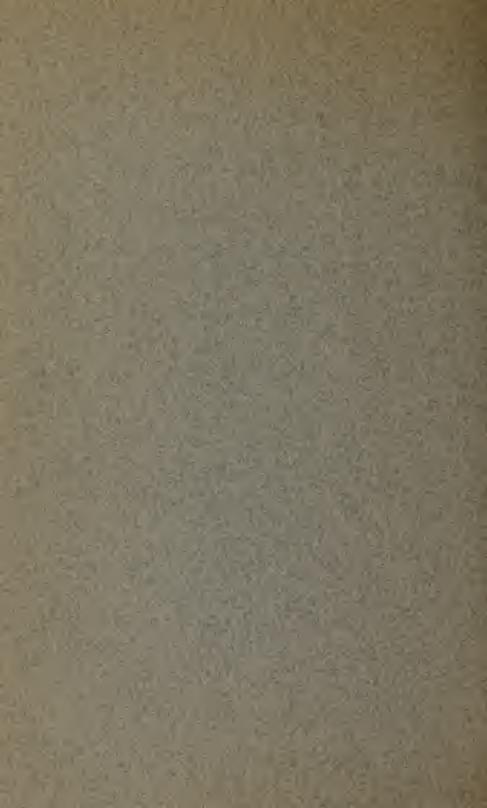
FREDERICK S. LYON, Solicitor for Defendant.

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This is an appeal from an interlocutory decree in equity granting an injunction prohibiting further infringement of certain letters patent.

The suit was heard in the District Court of the United States for the Southern District of California, the Hon. E. E. Cushman, U. S. district judge for the Western District of Washington, sitting by special designation.

For convenience the appellee, who was complainant below, will herein be referred to as complainant and appellant as defendant.

Defendant since 1905 has been manufacturing and selling the underreamers alleged to infringe the patent number 827,595, granted July 31, 1906, to complainant. It is admitted that since 1905 complainant has had full knowledge of this alleged infringement. The proofs show and complainant admits that during all these years complainant and defendant were competitors and both manufactured and sold their underreamers at Los Angeles, California. That they had no other competition; during all these years they have had the trade to themselves. Since 1908 a suit, No. 1540, in equity has been pending against the Wilson & Willard Manufacturing Company by the defendant herein (and its licensors and co-owners) for infringement of the Double patent for underreamers number 734,833, dated July 28, 1903, by reason of the manufacture and sale of "Wilson" underreamers in accordance with patent No. 827,595, here in suit.

During the month of February, 1913, depositions were being taken in such suit No. 1540 by this defendant against this complainant. While such depositions were being taken and after the proofs in such suit had been substantially completed on behalf of both parties, this complainant filed his bill of complaint against this defendant. Such suit was known as No. A-4. The original bill of complaint so filed in February, 1913, *charged infringement generally of the said Wilson patent.* [Record p. 6.] Defendant answered. By stipulation approved by the court the proofs were ordered taken in deposition form.

The issues, as thus framed by this bill of complaint in A-4 and the answer therein, were the validity of the Wilson patent, No. 827,595, and the infringement of claims I to 20, inclusive, thereof. At this point it is desired to emphasize the fact that this original bill of complaint alleged infringement of each and all of the claims of the said Wilson patent and *each and all* of the claims were put in issue by these pleadings.

On March 24th, 1914, after the suit had been pending thirteen months, the complainant commenced taking proofs by deposition. Complainant was called as the first witness in his behalf. During the taking of his deposition complainant *elected* to stand upon the charge of infringement of claims 16 and 17 of the Wilson patent and conceded that claims 1 to 15 and 18 to 20 were not infringed by defendant's reamers.

At this time, March, 1914, and for many years prior thereto, complainant admittedly had full knowledge of all of the forms of Double reamers manufactured by the defendant (except a new type called "Type F," which was not produced until long after this date).

During the taking of complainant's said deposition complainant's counsel stated on the record:

"At this point I may state that complainant *elects* to stand upon claims 16 and 17 of Complainant's Exhibit Wilson Patent." [Record p. 121.]

As will be pointed out in full hereinafter, these claims 16 and 17 are for the cutters or bits *per se*, regardless of what kind of an underreamer body they are used in or with.

By this election complainant conceded and acknowledged that none of the defendant's reamers infringed in any respect the Wilson patent *except as to the cut*- ters or bits per se as claimed in claims 16 and 17. Complainant conceded and admitted that no combination embracing any other feature or part of the Wilson invention had been appropriated by defendant. Complainant conceded that the bodies of defendant's reamers did not respond to the claims of the Wilson patent and that no one of defendant's reamers responded to any claimed combination of the Wilson patent. Yet the injunction was ordered on the theory that defendant's reamers did not have cutters or bits as called for by claims 16 or 17 but infringed claims 9 and 19, noninfringement of which had been conceded and stipulated by complainant.

This remarkable situation requires careful analysis and consideration. The question: How did any issue of infringement of claims 9 or 19 come before the court? must be decided before an inquiry into such alleged infringement. Did the lower court determine matters not in issue and not before it? We submit it did.

After making this election and abandoning all claim of any infringement of any of the other claims, and thereby not only in law but by direct positive affirmative action conceding that none thereof were infringed, complainant's counsel states:

"For the purpose of this suit in view of the election just made, complainant does not consider it necessary to produce the further parts of the two Double underreamers." [Record p. 121.]

This question of this election was concluded on the record by the following statements of counsel for the respective parties: "Mr. Lyon: In the bill of complaint in this case the complainant has charged generally the infringement of Complainant's Exhibit Wilson Patent, and at this time complainant evidently elects to abandon the charge of infringement of any of the claims except 16 and 17.

Mr. Blakeslee: That is correct, insofar as this suit is concerned, when we are dealing specifically with the claims." [Record p. 122.]

It will be found that this election was never set aside, nor was the complainant ever relieved therefrom. It will also be found that defendant relied upon this election and proceeded with the manufacture and sale of its underreamers in reliance upon this positive affirmative action and formal stipulation on the part of complainant placing his own construction upon his alleged invention and patent and conceding and stipulating that none of defendant's reamers infringed any of the claims of the Wilson patent except claims 16 and 17. This election was made after deliberation and after full advice of complainant's solicitor. It was made after nine years' knowledge of what defendant was making and selling.

Defendant was thoroughly satisfied that none of the bits or cutters manufactured by it infringed either claim 16 or 17.

The Wilson invention and patent having thus been construed by the complainant, and by his attorney, in this manner, defendant was certainly justified in relying upon such construction so placed upon such invention and patent by the complainant. Defendant had been manufacturing these reamers for over nine years. Complainant and its counsel had been in litigation over the claim that complainant's reamer was an infringement of this defendant's exclusive rights. Such litigation had then been pending six years. Clearly this election by complainant was after very mature deliberation and should not lightly be disturbed. Defendant had a right to rely thereon.

The taking of proofs in behalf of complainant in deposition form proceeded until the latter part of the year 1014, when defendant made another type of underreamer identified as "Type F." This "Type F" reamer was first interjected into this litigation on December 17, 1914. There was at that time pending in the District Court only said suit A-4. The same was pending upon the original bill of complaint, defendant's answer thereto, and the proceedings had during the taking of proofs, including in particular this election of complainant to stand on claims 16 and 17, and this concession by complainant (as a part of the trial of such suit) that defendant had not infringed any of the other claims of the Wilson patent by the manufacture of what are known in the record herein as the "Double Improved" and Type "D" and "E" reamers.

Thus we find that from 1905 to December, 1914, practically *ten* years, complainant had full knowledge of the defendant's reamers, was selling in open competition therewith, and had formally stipulated and conceded in this suit that except as to the claim of infringement of claims 16 and 17, defendant had not invaded in any manner complainant's patent. After nine years' open competition, after complainant and his counsel had for six years been both familiar with defendant's reamers and been defending in court against the claim that complainant's reamers infringed defendant's exclusive rights under the Double patent, complainant formally states on the record in this case that complainant does not even claim or assert any infringement of complainant's patent except of claims 16 and 17.

This election and stipulation has the same force and effect as though made in open court during the trial of the case. Complainant never asked or moved to be relieved therefrom and it stands binding upon the complainant.

The interlocutory decree appealed from adjudges and decrees that defendant has *not* infringed claims 16 and 17. Therefore, the bill of complaint in this original suit A-4 should have been dismissed at complainant's cost. The Honorable District Judge so found in his original opinion, filed June 19, 1916. He says:

"No infringement of claims 16 and 17 is shown. Therefore, decree will be for defendant in A-4." [Record p. 69.]

This finding clearly and positively freed defendant from all charge of infringement of the patent in suit embraced within the allegations of the bill of complaint in A-4. It followed that a decree in defendant's favor must be entered as to all reamers made or sold prior to December, 1914.

Inasmuch as such reamers were those known as "Double Improved," "Type C," "Type D" and "Type E," it followed that such decree would be *res adjudicata* that neither the "Double Improved," nor the

"Type C," nor the "Type D," nor the "Type E" reamers infringed the patent in suit. The further manufacture and sale of any of these could not form another cause of action or the basis of another suit by complainant against defendant.

Under the bill of complaint as filed the charge of infringement was of each and every one of the claims of the Wilson patent. It embraced *all* reamers manufactured to that date by defendant. A dismissal of such bill must have fully and finally absolved defendant from any and all charge of infringement by the manufacture of such reamers and amounted to an adjudication that none of the constructions or types of reamers manufactured or sold by defendant up to the time (at least) of filing such bill in A-4 was an infringement of the Wilson patent.

It followed, therefore, that there could be no injunction against defendant thereafter making or selling any reamer like those made or sold at the time said bill was filed.

It also followed that there could be no accounting of any profits made or derived by defendant from making or selling any such reamers. Such adjudication was also effective that complainant had suffered no damage.

The District Court, therefore, having found in appellant's favor and decreed that appellant had not infringed claims 16 and 17 of the patent in suit, and having found *that the original bill of complaint should be dismissed*, no injunction could issue against any underreamer thus adjudicated not to infringe.

In order, therefore, to sustain the injunction, the court must look elsewhere than to allegations of the original bill of complaint for facts to support any injunction against the so-called "Double Improved," Type "D" or "E." (Type "C" is conceded not to infringe and is not covered by the decree or injunction.)

The original bill of complaint put in issue the whole Wilson patent and charged infringement thereof by the various reamers therefore made and sold by defendant, i. e., the "Double Improved," "Type C," "Type D" and "Type E." Issue was joined upon these assertions of the complainant. A dismissal of such charge freed absolutely each of these of *all* claim of infringing such patent.

If complainant could file and sustain another suit to assert infringement of claim 9 or 19 of the Wilson patent by defendant's making or selling a "Double Improved," or Type "C," "D" or "E" reamer, why could complainant not now also file and sustain another suit asserting infringement by any of these of claim 16 or 17 notwithstanding the decree of noninfringement? All the claims were part of the original cause of action. Voluntary dismissal or voluntary concession of non-infringement or waiver of all claim of infringement of all claims except claims 16 and 17 was a complete and final determination against complainant of any such claim and unequivocally renders the judgment based on such original bill and answer as much res adjudicata and not to be again hauled into court as though such decree had been entered after trial. There was no order of dismissal of the original bill of complaint as to all claims except 16 and 17 without prejudice. No right to reassert any of the claims was reserved. To hold otherwise is to permit complainant to play fast and loose, not simply with defendant; but with the court. If complainant is not to be bound by such election and disclaimer then all the finality of judicial proceedings may better be set at nought and every rule abrogated, so that a party may have as many days in court and as many rehearings and retrials of any dispute as he may desire and may, according to his merest whim, demand the relitigation of: any cause after its most solemn determination according to law.

This being the situation and condition with respect to said bill and to said original suit A-4, let us consider, the acts of defendant, *subsequent to the filing of the bill in A-4*, to ascertain (1) what new cause of complaint, if any, complainant had, and (2) what procedure was had by complainant.

The taking of proofs proceeded on behalf of complainant during 1914. When complainant's prima facie proofs were almost completed, defendant brought out a new reamer. It is known herein as "Type F." It did not differ; according to defendant's belief (in any respect so far as the Wilson *patent* in suit is concerned), from defendant's other reamers. The essential difference between defendant's prior reamers and "Type F" resides in the provision of means for mounting the spring-actuated rod or T-bar in the body and the formation of the bottom spreading bearing partly removable so that the operating parts may be assembled from the bottom. No claim in the Wilson patent covered assembling from the bottom. The Honorable District Judge correctly found that complainant's patent did not cover the assembling from the bottom. He savs:

"As respects the forked formation permitting the reamer to be assembled from the bottom rather than from the top, as in Double's original invention, * * these are not directly matters affecting in any way the mode of operation of the machine and do not show invention." [Record p. 72.]

Of the prior "Jones Removable Bowl Reamer," the court says:

"This removable bowl reamer anticipated the forking of the lower extension * * * insofar as permitting the rod integral with the head or tee thereon—which carries the cutters—to be inserted from the bottom is concerned." [Record p. 75.]

The new cause of complaint or the supposed new cause of action was the "Type F" reamer.

The advent of this "Type F" reamer, however, being after complainant had filed this suit (in fact after issue had been joined and after complainant had practically completed his prima facie proofs), made it necessary for complainant to elect (1) whether complainant would file a supplemental bill of complaint to bring such reamer "Type F" in and have it considered in said original suit or (2) whether he would file a new original bill of complaint charging infringement by defendant by making and selling "Type F" reamers an infringement (if any infringement it were) that had entirely taken place after the filing of the original bill and after the issues thereunder had been joined.

If complainant filed a supplemental bill and brought in such charge of infringement by the "Type F" reamer, he took the chance that if he failed to maintain his original bill against the other reamers, his supplemental bill would fall therewith. For it is a rule that a supplemental bill cannot stand alone.

> Street's Fed. Eq. Practice, Vol. 2, Sec. 1163; Mellor v. Smither, 114 Fed. 116.

"Where plaintiff has no cause of action when his bill is filed, he cannot cure the defect by bringing in subsequent matters constituting good cause of action by a supplemental bill."

Kryptock Co. v. Hausmann, 216 Fed. 267.

In Chicago Grain Door Co. v. Chicago, B. & Q. R. Co., 137 Fed. 101, District Judge Sanborn says:

"The rule that there can be no supplemental bill when the complainant has in fact no cause of action when suit commenced, and neither states a case, nor can do so, is too well settled to require extended citation. Mellor v. Smither, supra; New York etc. Co. v. Lincoln etc. Co. (C. C.), 74 Fed. 67: Bernard v. Toplitz, 160 Mass. 162, 35 N. E. 673, 39 Am. St. Rep. 465; Putney v. Whitmire (C. C.), 66 Fed. 387; Pinch v. Anthony, 10 Allen 477; Hughes v. Crane, 137 Ill. 519, 26 N. E. 517. It is equally well settled in patent cases that complainant must have a cause of action when the bill is filed. Judson Mfg. Co. v. Burge-Donaho Co. (C. C.), 47 Fed. 463; Slessinger v. Buckingham (C. C.), 17 Fed. 454. In Humane Bit Co. v. Barnet (C. C.), 117 Fed. 316, this rule was carried so far as to dismiss the bill where the proof showed infringement after the filing of the bill, but before service of subpoena, following Farmers' L. & T. Co. v. Lake St. El. R. Co., 177

U. S. 51, 20 Sup. Ct. 464, 44 L. Ed. 667, deciding that suit is begun when the bill is filed.

"The limited purpose of a supplemental bill is to repair or add to a good original case, shown by an original bill, good or bad, either to supply defects sometimes existing when suit brought, but usually afterwards occurring, or to support, fortify, or re-enforce.

"If complainant has in reality no case in the original suit, the supplemental bill must fail."

At the time complainant decided to take action against defendant on account of the "Type F" reamers, the issues in the A-4 suit had been limited down to complainant's claim of infringement of claims 16 and 17. Complainant had stipulated and conceded that none of the defendant's reamers infringed any of the other claims. Such election, concession and stipulation was in effect a decree of dismissal of all claims of infringement *except as to claims 16 and 17. Complainant was effectively estopped* by his own solemn election and could not and cannot be heard to thereafter claim the contrary, i. e., infringement by either of the "Double Improved" or Types "C," "D" or "E" reamers of any claim other than 16 or 17.

The reason for thus analyzing the facts and procedure is apparent when it is remembered that the lower court decreed that *none* of defendant's reamers infringed either claim 16 or 17 and that *all* (*except "Type* C") infringed claims 9 and 19.

The question must therefore immediately arise— How did any claim of infringement of claims 9 or 19 come before the court? A second question also arises and must be answered: If infringement of claims 9 and 19 is in issue, does such issue of infringement embrace the reamers "Double Improved" and Types "D" and "E" (which formed the cause of action of the original bill), or is such issue as to claims 9 and 19 limited to a new cause of action arising from the "Type F" reamers?

The opinion of His Honor, Judge Cushman, fully supports defendant's position that the injunction *was not* ordered upon the issues of the original bill or of the suit A-4. Judge Cushman's opinion concludes:

"No infringement of claims 16 and 17 is shown. Therefore, decree will be for defendant in A-4." [Tr. Record p. 69.]

The opinion then proceeds with a heading "B-62" and:

"The claims of the patent alleged to be infringed in cause B-62 are numbered 2, 4, 8, 9, 10, 11, 12, 13, 14, 15 and 19."

Defendant asserts that it is a fair interpretation of Judge Cushman's opinion to state that all the issues of the original bill of complaint in suit A-4 were determined in favor of defendant and that Judge Cushman did not consider that in suit A-4 the complainant had ever been relieved of his election to stand solely upon claims 16 and 17 and his abandonment of all the other claims. On the contrary Judge Cushman's opinion is definite and certain that "The decree will be for defendant in A-4" as "No infringement of claims 16 and 17 is shown." Judge Cushman then says that in cause B-62 "the claims * * * alleged to be infringed are numbered 2, 4, 8, 9, 10, 11, 12, 13, 14, 15 and 19." It is noted that claims 16 and 17 are omitted from this catalogue of the claims.

From this opinion it will be seen that Judge Cushman bases the decree of the District Court and the order for the injunction appealed *solely on cause B-62*.

If Judge Cushman be in error in holding that all of the types of reamers manufactured by the defendant are involved in cause B-62 or that such suit or cause B-62 is not limited to causes of action or infringement arising after the election in suit A-4 (the "Type F" reamers), then the order for the injunction cannot be sustained and must be reversed.

In passing it is only right to emphasize what Judge Cushman has emphasized.

In his memorandum opinion Judge Cushman concludes the consideration of suit "B-62" as follows:

"Therefore, it is held that the *machine* of the defendant infringes claims 9 and 19 of the patent in suit." [Tr. p. 79.]

(The italics emphasize an important fact to be recognized in passing. Judge Cushman says "the *machine*" not "machines." We shall show cause B-62, according to the bill of complaint therein, refers solely to one machine, the "Type F" reamer.)

The two questions:

(1) How did any claim of infringement of claims 9 and 19 come before the court? and

(2) If infringement of claims 9 and 19 is in issue, does such issue of infringement embrace the reamers "Double Improved" and Types "D" and "E" (which formed the cause of action of the original bill in A-4), or is such issue as to claims 9 and 19 limited to a new cause of action arising *after* the commencement of suit A-4 and growing out of the Type "F" reamers?

must be answered by the issues as framed in suit A-4, including complainant's election therein to stand on claims 16 and 17, alone, and his concession that none of the reamers theretofore or then being manufactured or sold by defendant infringed any of the other claims, and the subsequent procedure.

Complainant did not file a supplemental bill in suit A-4.

But complainant, *without* dismissing his original suit A-4, filed a new and independent suit by an original bill. This suit was known as No. B-62. This bill was filed December 28, 1914. [Tr. pp. 28-35.]

Paragraph V of this bill of complaint [Record p. 31] charges infringement as follows:

"within the year last past and prior thereto * * * made, used, leased and sold, and is now making, using, leasing and selling underreamers embodying, containing and embracing the invention described, claimed and patented in and by said letters patent No. 827,595 and particularly set forth and defined by claims 2, 4, 8, 9, 10, 11, 12, 13, 14, 15 and 19 thereof."

This allegation is not limited to any particular type or construction of reamer or to ANY *particular act* of infringement. It alleges infringement not only "within the year last past" but also "and prior thereto" and clearly embraces every cause of action attempted to be alleged in the bill filed in suit A-4, which was still pending.

Reference to paragraph V of the bill of complaint in suit A-4 [Record p. 5] shows identically the same allegations except that the bill does not exclude any of the claims but covers all "the invention described, *claimed* and patented in and by said letters patent No. 827,595." The words "within the year last past and prior thereto" are identical in both bills.

If the original suit A-4 had been sustained defendant would have been liable for all damages and profits from acts of infringement within six years prior to the filing of the bill. (Six years prior to February 14, 1913.) While under the new original suit No. B-62 such liability would be barred by the statute of limitations, for the period from *February 14, 1907, to December 28,* 1908. (The acts of alleged infringement continued during all of such period and form a material part of this controversy.) This statute of limitations is section 4921, Compiled Statutes of 1901, 5 Fed. Stat. Ann. 577.

These two suits A-4 and B-62 being between the same parties and covering the same causes of action, defendant moved to dismiss the new suit B-62 for the reason that a party cannot twice sue for the same cause of action, asking the same relief.

To meet this motion complainant moved for leave to file an *amended bill* in suit B-62 and that such suit then be consolidated with the suit A-4. [Record p. 27.]

What was the purpose of such amendment? Defendant submits that its purpose and its legal effect was to limit the charge of the amended bill in new suit B-62 to confine that suit to matters not within the scope of the bill in suit A-4. In other words to new infringements subsequent to the commencement of suit A-4. Such new claimed infringement was the Type "F" reamer.

Complainant was granted leave to file the amended bill in suit B-62 and upon such motion being granted defendant's motion to dismiss suit No. B-62 was denied. [Record pp. 48 and 49.]

Bearing in mind the fact that defendant did not make or sell a Type "F" reamer until late in 1914 and brought out no other new type or construction of reamer after the filing of the bill in suit A-4, attention is specifically directed to the *amendment* thus made in the bill in suit No. B-62. This amendment consisted in a substitution for the paragraph V of the original bill in B-62 [Record p. 31] of a new paragraph V as follows:

"And your orator further shows unto Your Honors that there is pending between the parties to this suit in equity in the same court, another suit in equity entitled Elihu C. Wilson, complainant, vs. Union Tool Company, defendant, No. A-4. in which infringement by the defendant herein is charged with respect to the letters patent sued under herein; that certain proofs have been taken on behalf of complainant in said other suit and an election has been made to stand upon claims sixteen and seventeen of said patent in suit; that since the commencement of taking proofs in said other suit, defendant herein, and in said other suit, has been found to have departed from its original procedure in the manufacture and sale of underreamers, and to have further and more elaborately infringed the letters patent sued under

therein and herein, thereby as your orator alleges upon information and belief, infringing, or further infringing, claims 2, 4, 8, 9, 10, 11, 12, 13, 14, 15 and 19 of the said patent therein and herein sued under, all as hereinafter more particularly alleged." [Record p. 42.]

This amendment thus pleads "an election * * * to stand upon claims sixteen and seventeen of said patent" in suit No. A-4. No attempt is made by complainant to set aside such election or to be relieved therefrom. The amended bill in suit B-62 pleads this election as in full force and binding on complainant. No action whatever was ever taken to relieve complainant therefrom. His Honor Judge Cushman treated the suit A-4 as limited to claims 16 and 17.

Having thus pleaded this election in suit A-4, this amended bill thus distinguishes the cause of action from the cause of action in suit A-4 and this for the purpose of meeting defendant's said motion to dismiss:

"That since the commencement of taking proofs in said other suit" (No. A-4) "defendant herein and in said other suit, has been found to have departed from its original procedure in the manufacture and sale of underreamers, and to have more elaborately infringed the letters patent sued under therein and herein."

This "departure from its original procedure" was the making and sale of Type "F" reamers. This was the new act of defendant "since the commencement of taking proofs in said other suit" and this was the new cause of action which caused His Honor Judge Bledsoe to deny defendant's motion to dismiss suit B-62. Most certainly a party cannot divide or split upon his cause of action and maintain two suits, one for one part—another for another part of such cause of action.

Complainant having sued defendant in suit A-4 on all the Wilson patent, cannot thereafter say I elect to prosecute this suit A-4 for so much of my cause of action as is covered by claims 16 and 17 and I will afterwards bring an additional suit on the other claims of such patent. Nor is such an intention fairly deducible either from the election made in suit A-4 or the amended bill in suit B-62. In suit A-4 complainant put the whole Wilson patent in issue. He elected to disclaim any infringement except as to claims 16 and 17. He then afterwards finds defendant with another new construction. This he thinks infringes other claims. He pleads this as a new departure since the taking of proofs in A-4.

But we are not confined to these pleadings for full light on this situation. The record of proceedings is replete with the construction placed by complainant on both the election in A-4 and the new suit B-62. The record not only clarifies complainant's action in thus amending his bill in suit B-62 but gives us his formal statement *as a matter of court record* as to his construction of suit B-62.

On December 21, 1914, prior to the filing of suit B-62, complainant's counsel stated formally as a part of the record:

"Mr. Blakeslee: In response to inquiry of counsel for defendant, as to what further portions of the Wilson patent in suit complainant wishes to rely upon in departure from the election of record, as to the charge of an infringement with respect to Complainant's Exhibit, Reamer Type 'F,' counsel for defendant is informed that the following further claims, together with the pertinent portions of the specification and drawings of the Wilson patent in suit, are believed to be involved by said last-mentioned exhibit, to-wit: Claims 2, 4, 8, 9, 10, 11, 12, 13, 14, 15 and 19." [Record p. 448.]

On December 31, 1914, complainant's counsel stated formally on the record:

"And, in order that the proof of infringement might be complete, the subsequent bill charging infringement by this type of reamer has been filed, and, in order that, if the court so direct, all of the issues of infringement charged may be tried out in this suit, the motion is made to consolidate the subsequent suit with the present one." [Record p. 517.]

The theory of complainant's motion to consolidate suits A-4 and B-62 is set forth in the statement of complainant's counsel on the record on December 31, 1914, as follows:

"Mr. Blakeslee: There were a number of procedures open to complainant subsequent to the offering in evidence of Complainant's Exhibit Reamer Type 'F.' Those proceedings, including the filing of a further bill or a new original bill, were discussed on the record between counsel for both parties at the last session. An original bill has been filed alleging infringement of certain claims of the patent in suit, other than the claims involved *in the election charging* infringement in this case. (A-4.) It is the present purpose of complainant to move this Honorable Court for an order consolidating the suit thus filed, involving this patent subsequent to the present suit, with the present suit, upon a showing that the issue of such subsequent suit involves the exhibit Complainant's Exhibit Reamer Type 'F' in this present or first-brought suit, and in order that, as to such exhibit, the issues of infringement under the patent in suit may be broadened out in the respects of such further bill. We have not attempted to dodge the election made in this case." [Record p. 513.]

By reference to the record pages 517 and 518 it will be found that the taking of proofs in suit A-4 was adjourned to permit the determination of complainant of his procedure "with reference to this question of alleged infringement by reamers like Complainant's Exhibit Type 'F'."

We thus have complainant's distinct and definite statements that complainant does not seek to abrogate the election and concession that defendant's reamers other than Type "F" do not infringe and are not claimed to infringe the Wilson patent *except as to claimed infringement of claims 16 and 17* and that the new suit was filed solely with regard to Type "F." The amended bill, paragraph V, pleading the election in suit A-4 as binding and unimpeached, shows conclusively that *only* Type "F" reamers were involved in suit B-62.

If this be correct the injunctional order is in error as it distinctly and specifically enjoins *all* types.

Clearly the decree that the "Double Improved" or Types "D" or "E" reamers infringe and be enjoined cannot be sustained under the bill of complaint and election in suit A-4. It is equally true that such order or decree cannot be sustained under the amended bill in suit B-62.

On February 16, 1915, complainant's counsel makes the following statement a part of the record:

"Such proceedings on such motion to consolidate being taken in view of the election by the complainant to stand upon claims 16 and 17 of the claims of the Wilson patent in suit, the complainant again offers in evidence the underreamer marked 'Complainant's Exhibit Reamer Type F' as 'Complainant's Exhibit Reamer Type F' under pleadings in equity suit No. B-62 heretofore consolidated by order of the court with the above entitled suit." [Record p. 521.]

This is the last reference in the record concerning this election and shows conclusively that complainant was never relieved in any manner therefrom, but on the contrary the proofs in the case were completed on complainant's statement that he stood on such election.

The facts, therefore, squarely present the proposition:

Can a patent owner sue an infringer on all claims of his patent, then give notice that he concedes that all except one or two claims are not infringed, and thereafter in another suit haul the alleged infringer back into court to again litigate the allegations of infringement as to such other claims, which he has so abandoned as not infringed?

Can such patent owner split up his cause of action

in equity and after abandoning part of it in one suit, reassert such abandoned portion in a subsequent suit?

It is submitted that there is no basis for that portion of the interlocutory decree which orders and decrees that defendant has infringed upon the patent in suit and particularly upon claims 9 and 19 thereof "by the manufacture and sale or lease or sale and lease of the socalled 'Double Improved' underreamers * * * like 'Complainant's Exhibit Improved Double Reamers and Cutters' and Complainant's Exhibit Defendant's Reamer Type 'D' and Complainant's Exhibit Reamer Type 'E,' " or which decrees that defendant be enjoined and restrained from manufacturing "any underreamer or underreamers like or embodying the construction or interrelation or formation of parts of either 'Complainant's Exhibit Improved Double Reamer and Cutters' or Complainant's Exhibit Defendant's Reamer Type 'D' or Complainant's Exhibit Reamer Type 'E.'"

The decree appealed from should be reversed and the case remanded to the district court with instructions to modify the decree so that it shows that it applies solely to the Type "F" reamers. That this was the only type of reamer before the court on a charge of infringing either claim 9 or 19.

The question of the Type "F" reamers infringing will be hereinafter discussed and this statement is not an admission that even the Type "F" reamers infringe, but so far we have been considering in this brief solely the question whether any other type or construction of reamer except the Type "F" is embraced within the issues of the amended bill in B-62 and whether the lower court erred in embracing within its decree matter not in issue under the pleadings and not before the court for determination.

In passing the court's attention is directed to the record which contains a full exposition of the manner in which the Type "F" reamer was interjected in this litigation,—in suit A-4 and then by the filing of the original bill in B-62.

The Type "F" reamer was first interjected into this litigation on Dec. 17, 1914 [Tr. of Record deposition of E. C. Wilson, p. 494-499, Qs. 442-448].

It will be noted that no objection at this time was made to the offering in evidence of the Type "F" reamer on the ground that it was not within the issues of the election made by complainant in suit A-4. It was assumed by, and defendant had a right to assume, that the Type "F" reamer was then offered in evidence under a charge of infringement of claims 16 and 17 of the Wilson patent and under the concession that such reamer did not infringe any of the other claims, the issues of the suit A-4 being limited to these two claims by the election and abandonment of complainant.

At the session of December 19, 1914 [Record p. 437] it was stipulated and admitted that the Type "F" reamer exhibit was made and sold by defendant since the commencement of the suit A-4 and during the year 1914, and complainant, through its counsel, then makes the following most significant statement upon the record:

"Mr. Blakeslee: In view of the stipulation and admission just made by the defendant, with respect to Complainant's Exhibit, Reamer Type 'F,' which we are prepared to show to the court was not before complainant at the time the bill herein was filed, nor at the time the prima facie proofs in this case, in the early part of this year were taken, nor at the time that the election was made by complainant to stand upon certain portions of the patent in suit, as indicated more particularly by claims sixteen and seventeen of the patent in suit, and the supplementary portions of the disclosure of the patent in suit, complainant finds it necessary, in order to make out a full case of infringement against the defendant, to take proper steps to depart from the election heretofore (366) made as above recited, that election we are prepared to stand by with respect to the alleged infringing structures, other than Complainant's Exhibit Defendant's Reamer Type 'F'.

"We therefore make inquiry of defendant, whether it will voluntarily, and on stipulation, permit complainant to withdraw and depart from said election *in treatment of this Type 'F' reamer construction*, or whether defendant will put us upon procedure to obtain permission *to so* depart from such election, or to file a supplemental bill herein, or take other procedure in the premises to the end that in this same case in equity, all of the alleged infringing structures before us, may be before the court, and passed upon by the court at the final hearing of this case." [Record pp. 437, 438.]

Relying upon this statement of position by the complainant, defendant's counsel replied thereto as follows:

"Mr. Lyon: That the defendant may fully understand complainant's position, and before making any answer to the question of complainant's counsel, it will be necessary for complainant to state upon the record what departure he wishes to make with respect to any alleged infringement by Complainant's Exhibit Reamer Type 'F' from the election to claim infringement only of claims sixteen and seventeen of 'Complainant's Exhibit, Wilson Patent' sued on herein. In other words, what claims of said patent in suit does complainant contend are infringed by Complainant's Exhibit, Reamer Type 'F'." [Record pp. 438-439.]

Complainant's counsel then answers as follows:

"Mr. Blakeslee: Complainant, in order to so specifically depart from the election herein made, submits that at the next session of taking proofs herein, he will, through his counsel, submit, or before such time submit to counsel for defendant, a specification of such further claims of the remaining portions of the patent which it is desired to allege are infringed by such Complainant's Exhibit Reamer Type 'F.'" [Record p. 439.]

Defendant stated on the record at that time that it would answer complainant's inquiry when complainant fully developed his position, and stated "At the present time, I insist that complainant is bound by his election in this suit."

At the session of December 21, 1914, which was the session following that to which reference has just been made, at the opening of such session complainant's counsel stated on the record:

"Mr. Blakeslee: In response to inquiry of counsel for defendant, as to what further portions of the Wilson patent in suit complainant wishes to rely upon in departure from the election of record, as to the charge of an infringement with respect to Complainant's Exhibit Reamer Type 'F,' counsel for defendant is informed that the following further claims, together with the pertinent portions of the specification and drawings of the Wilson patent in suit, are believed to be involved by said last-mentioned exhibit, to-wit: Claims 2, 4, 8, 9, 10, 11, 12, 13, 14, 15 and 19." [Record p. 448.]

(In passing, we call the court's particular attention to the fact that complainant here states that he believes the Type "F" reamer infringes the very claims which are specified by numbers in both the original and amended bill in suit B-62. It is submitted this is significant as showing the intendment of complainant by such suit. Peculiarly and particularly is this true in view of the statements heretofore quoted of complainant that "the subsequent bill charging infringement by this type of reamer has been filed," and that the purpose of the subsequent suit B-62 was to bring the Type "F" reamer before the court.)

After the statement just quoted by complainant's counsel, the record, page 448, shows that complainant then asked counsel for defendant "if he is prepared to state his attitude with respect to such departure from said election, with respect to this last named exhibit."

Defendant's counsel then replies:

"Inasmuch as the construction of the reamer exemplified in Complainant's Exhibit Reamer, Type 'F,' has been produced by the defendant since the commencement of the taking of proofs in this case and long since the answer of defendant in this suit, and inasmuch as this suit has heretofore progressed upon an alleged charge of infringement of claims sixteen and seventeen only,

complainant does not object to the determination of a charge of any alleged infringement, or charge of infringement, by the manufacture or sale of reamers like Complainant's Exhibit Reamer, Type 'F,' in this suit, and will raise no question as to the bringing in of such reamer in this suit, to try the alleged question of infringement thereof, such claim of infringement being limited in accordance with the limitations of the election heretofore made by complainant in this case, but insists that for all purposes of this case, complainant is bound by such election, and cannot interject into this case any other matter. The bill in this case was an allegation of general infringement and complainant, upon the record, thereafter elected and stated that claims sixteen and seventeen were the only claims relied upon, thereby limiting this suit to that issue, and in effect, dismissed the suit as to any and all other claims of said Wilson patent. Defendant will insist that complainant is bound by such election and cannot at this point set aside or abrogate such election, and defendant will leave complainant to such procedure as complainant is advised to take in the matter, defendant objecting to any attempt to extend this litigation beyond the scope of the election and stipulation so made on the record by complainant." [Record pp. 448-449.]

We call the court's particular attention to the record of proceedings upon this matter forming the session of December 21, 1914, and included in pages 448-457 of the transcript.

The next session, after this session of December 21, 1914, was the session of December 31, 1914,--three days after the filing of suit B-62.

We call the court's attention to the proceedings and statements of counsel on that date and to the particular statement made by complainant's counsel that the motion for consolidation is made "upon a showing that the issue of such subsequent suit involves the exhibit Complainant's Exhibit Reamer Type "F" and that complainant has "not attempted to dodge the election made in this case" [Record p. 513] and also the statement of complainant's counsel at the top of page 515 of the record that "It may be that upon the ruling of the court upon said motion all charge of infringement in and by said reamer Type "F" may be decided to be pressed in the further suit in which said motion is brought."

Attention is also called to the statement of complainant's counsel on page 517 that the subsequent bill charging infringement by this Type "F" reamer has been filed, and to the agreement on page 518 that all proceedings be suspended until the question of procedure regarding alleged infringement by reamers like Type "F" has been determined.

No subsequent or additional suit was necessary or proper to bring before the court any of the forms of reamers which had been manufactured by defendant prior to the filing of the bill in A-4. Such suit embraced within its allegations, and the proofs taken thereunder had to do with, the Double Improved reamers, embracing all thereof, except the 1914 production, -Type "F."

That complainant sought to have defendant waive the necessity of a supplemental bill to bring in the subsequent alleged infringement, Type "F," and as to

that type stipulate that the election should not be binding on complainant is clear. It is significant that during none of these remarks by counsel for complainant is any mention made of being relieved generally of such election, but that, on the contrary, each time complainant distinctly reiterates that complainant is bound thereby and is not attempting "to dodge" such election. In a nut-shell, the entire record shows that complainant brought the new suit B-62 so as not to be bound by this election so far as Type "F" remears are concerned, and never had any idea or intention of being relieved from such election as to the Double Improved types. It was this record and upon these representations that defendant's motion to dimiss suit B-62 was denied by Judge Bledsoe, and the order of consolidation granted. It is apparent that at that time complainant did not consider any other reamer infringed claims 9 or 19.

The motion to consolidate appears on page 36 of the printed record. Particular attention is called to the statement that such motion is based "upon the proceedings taken in said equity suit A-4." Such proceedings include complainant's statements that the purpose of suit B-62 was to broaden out the issues of infringement as to the Type "F" reamer [Record, p. 513] and that "the subsequent bill charging infringement by this type of reamer has been filed." [Record II. 23-25 p. 517.] This statement is made after suit B-62 was commenced and characterizes such suit.

The supplemental motion [Record p. 37] asking leave to file an amended bill in B-62 and then for consolidation of suits A-4 and B-62, together with the statements on the record in A-4, were before Judge Bledsoe when this motion was determined by him and from all these it is easy to gather the real intendment of the order of consolidation.

The order of consolidation does not pretend to relieve complainant of his election in A-4 nor does it pretend to extend in any manner the issues to be tried. It could not. The amended bill pleads and stands on the election. The order simply consolidates the two cases for convenience in trial. *The issues remained the same as set forth on the record of the respective suits.* There is nothing on the record to show any intention of the court to enlarge such issues.

The district court evidently considered its order of February 15, 1915 [Record p. 49], premature, for on April 19, 1915, after defendant had answered the amended bill in B-62, a new order of consolidation was entered. [Record pp. 59-62.] A study of this order shows that it was "without prejudice, however, to the right of the defendant to move * * * to set aside said order of consolidation."

In this second order no intention appears to enlarge the issues of said cases A-4 and B-62 and the election of complainant is not referred to. The order does not abrogate the pleaded election. On the contrary the order is merely a consolidation of the two then independent cases on the issues as they stood on the record then before the court. That was complainant's motion. [See motions pp. 48 and 49.]

A mere order consolidating two cases for the purpose of convenience in trial does not change or enlarge the issues as made up by the parties. It is an order that the two litigations be heard together. But *ipso facto* does not alter or enlarge the inquiry or enlarge the matters in dispute to be determined by the court.

To hold otherwise is to abrogate the Statute of Limitations. In suit A-4, if successful, complainant would recover for six years prior to filing the bill. If mere consolidation enlarges the whole issues then, under complainant's theory the charge of infringement filed December 28, 1914, is extended in defiance of this statute, so that complainant's recovery goes back not simply six years prior to December 28, 1914, but six years prior to February 14, 1913. This is substantial in this case as the "Double Improved" Type "D" and "E" reamers have been made and sold by defendant since 1905, according to the complainant's testimony.

On June 27, 1916, a rehearing was granted by Judge Cushman. [Record p. 80.] The opinion on rehearing appears at page 81.

After the trial or final hearing of this case Judge Cushman filed the opinion appearing on pages 65-79 of the record. He ordered the bill in A-4 dismissed. He ordered the injunctional relief prayed in B-62 granted as to claims 9 and 19. At the hearing complainant's counsel said:

"It developed that the defendant had more elaborately infringed the patent as we charged, by making another underreamer" [counsel refers to Type "F"], "which infringed, as we charged by our new bill, claims 2, 4, 8, 9, 10, 11, 12, 13, 14 and 19, in addition to claims 16 and 17." [From the stenographic report of argument filed by order of court.] Up to the time a rehearing was granted, by reason of dispute arising as to whether a separate decree should be filed in each case, A-4-B-62, in accordance with Judge Cushman's decision, no claim was made by complainant that the bill in B-62 involved anything more than the Type "F" reamer.

After complainant had closed his opening case, July 23, 1915, the taking of defendant's proofs was commenced. Complainant's counsel made the following statement on the record:

"Mr. Blakeslee: Complainant gives notice to the defendant at this time that alternative to any disposition which may be made of equity suit No. B-62, consolidated by the order of the court with equity suit No. A-4 consolidated, in which these proceedings are being conducted, namely, any disposition which (455) may be made of said equity suit No. B-62 at the final hearing of this case with respect to such consolidation of said two cases, complainant at such final hearing will rely upon claims Nos. 2, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 19, of the Wilson patent in suit herein. This notice of alternative attitude or position is given at this time in order that defendant may be apprised in the premises before commencing the taking of its proofs." [Record Vol. II p. 541.]

This statement was construed at the time by defendant in connection with paragraph V of the amended bill in B-62 and in connection with and in the light of complainant's statement on the record December 31, 1914 (page 513):

"It is the present purpose of complainant to move this Honorable Court for an order consolidating the suit thus filed, involving this patent subsequent to the present suit, with the present suit, upon a showing that the issue of such subsequent suit involves the exhibit Complainant's Exhibit Reamer Type 'F' in this present or firstbrought suit, and in order that, as to such exhibit, the issues of infringement under the patent in suit may be broadened out in the respects of such further bill. We have not attempted to dodge the election made in this case."

Also, in connection with complainant's statement:

"Mr. Blakeslee: We do not understand that there has been any waiver in any respect by either party in regard to this matter of Complainant's Exhibit Reamer Type 'F,' nor that there has been any election by complainant other than to fully prosecute any possible charge of infringement in respect to this type of reamer. And, in order that the proof of infringement might be complete, and subsequent bill charging infringement by this type of reamer has been filed." [Record p. 517.]

And the statement contained in the last paragraph on page 521.

Judge Cushman's opinion on the rehearing seems to be very inconsistent. In the opening paragraph [Record p. 81] he states that prior to the order of consolidation there was much said by complainant to support the contention now made by defendant, but that it must be borne in mind that such statements were made with a view to securing a stipulation to waive complainant's election. That such stipulation was not made. Upon what action of the court does Judge Cushman rely as relieving complainant from such election?

Complainant had no right to dismiss a part of his bill in A-4 and bring a new and independent suit on such part so dismissed.

Camden & Amboy Co. v. Stewart, 4 C. E. Green N. J. 69.

The orders of consolidation do not order that complainant be relieved from this election. This election is pleaded as in force and effect by paragraph V of the amended bill in B-62.

It follows from the fact that there was neither a court order relieving complainant from this election, nor a stipulation to that effect, that such an election can *not* be held as a dismissal *without prejudice* of an indivisible part of the cause of action asserted in the bill in A-4, or that complainant, in defiance of and against the very terms of paragraph V of the amended bill in B-62 (which is the pleading upon which he must stand), may assert that the "Double Improved" types of reamers stood charged as infringing either claim 9 or 19, or that such an issue was presented in this litigation for determination.

Judge Cushman, it is submitted, has entirely misconstrued the issue as presented by the amended bill in B-62. He says:

"Nothing short of a clear, unequivocal election to withdraw or discontinue the suit as to alleged infringements set out in B-62 would suffice to narrow the issues thereby tendered." [Last paragraph Record p. 82.] This would indicate that, as shown by Judge Cushman's original opinion, he did not consider the suit A-4 as in any manner raising the issue of infringement as to claim 9 or 19 as to the "Double Improved" types of reamers in view of the election made by complainant in that suit, or that complainant in that suit A-4 had been relieved in any manner from such election. On the contrary both the original opinion and this rehearing opinion seem to base the holding that any issue of infringement of claim 9 or 19 by such "Double Improved" types was based wholly on the suit B-62. Yet this election is part of the pleaded cause of action in B-62.

Judge Cushman says that complainant had a right to withdraw such election. But complainant never withdrew such election. He pleaded such election as in effect. He stated on the record he did not intend to "dodge" such election. He secured the denial of defendant's motion to dismiss suit B-62 on the ground such election was in force and effect and that he stood thereon, and that the suit B-62 was directed to a new and different infringing act,—the Type "F" reamer.

Has the court any right to utterly disregard the averments of paragraph V of the amended bill in B-62, upon which complainant has stood on the motion to dismiss and upon which he has secured the order of consolidation, and reframe for complainant the issues? And this without even a motion or intimation to that effect by complainant and in direct conflict with the statements on the record as to the basis and purpose of the new and independent suit B-62? Defendant went to trial on the issues raised by these pleadings. Such pleadings were never amended to relieve the complainant from the election thus formally made and most formally pleaded. Is it not inequitable to confront defendant with an issue not raised by the pleadings,—one inconsistent therewith? And one which extends for eighteen months its liability in derrogation of the Statute of Limitations?

Having pleaded such election as part of the issue tended, can complainant relieve himself therefrom by merely saying I reassert that the "Improved Reamers" infringe claims 9 and 19? This is the most complainant even claims to have done to avoid such election. And the record does not show he ever even did that.

The first point that is submitted for this court's determination, therefore, is:

The interlocutory decree appealed from is in error in decreeing that there was any issue before the court to be determined respecting any infringement of either claim 9 or 19 except as to the Type "F" reamer, and that the decree is erroneous and broader than the issues in determining that the "Double Improved" Types "D" or "E" reamers infringed either claim 9 or 19, or in enjoining either of these as infringements of either claim 9 or 19 for the reason that such issue was not before the court for determination. Upon the issues as made by the pleadings, and by the election pleaded, the decree should have been that no infringement of claims 16 and 17 is found, and that the issue of the pleadings in suit B-62 was limited to the Type "F" reamer. A party has not the absolute right to dismiss without prejudice a suit which he has commenced in equity. As this court held in

Ebner v. Zimmerly, 118 Fed. 818:

"The propriety of permitting a plaintiff to dismiss his bill without prejudice, is a matter within the discretion of the court, which discretion is to be exercised with reference to the rights of both parties."

See also:

Stevens v. The Railroads, 4 Fed. 97; Folger v. Shaw Co., Fed. Cas. 4, 899.

The election in A-4 was tantamount to confessing judgment that the "Double Improved" reamers did not infringe any claims of the Wilson patent except claims 16 and 17, and upon such election defendant was entitled in suit A-4 to a decree to that effect.

This is recognized by paragraph V of the amended bill in B-62.

There are two well known methods or systems of drilling artesian and oil wells; there is a third system (Canadian Pole system), very little known in this country, to which reference, however, will be made, before we close.

The first two systems are those known as the cable tool or "standard" system and the rotary system. We have, in this case, nothing whatever to do with the rotary system.

The cable tool system is the system which has been referred to in the testimony both as the standard and as the cable tool system. It consists essentially of a high derrick with windlasses, called "bull" wheels and "calf" wheels, for winding up and releasing the cables or ropes to which the tools and pipe or casing are attached. The hole in the ground is made by the drop of the string of tools.

With the standard or cable tool system, in drilling, a certain amount of water is kept in the bottom of the hole, so as to fill the bottom of the hole and churn up a mud. This mud, or detritus formed by the drillings and the water, is taken out of the hole in the earth by a "sand pumper or bailer" or suitable device which is run down inside of the casing on the end of a bailer line operated by the third reel or drum in the ordinary standard rig.

When drilling with the cable tool system ordinarily a heavy bit is used. This bit must pass readily through the inside of the pipe or casing and unless the formation is very soft, this drilling bit will cut a smaller hole than the outside diameter of the pipe or casing. When hard strata, rock or projecting boulders are reached it is necessary that the hole underneath the casing through that hard strata be enlarged, or "underreamed," that is reamed out under the casing, so that the casing may follow down the well hole. Such a device, which will expand to cut a hole larger than the casing, after it has been dropped through the casing, is called an "underreamer."

Ordinarily, in underreaming, this well casing is held up a suitable distance above the bottom of the hole or above the ledge through which the hole has been extended, so that the string of tools with the underreamer on it may have sufficient drop to crack off parts of the ledge, and thereby enlarge the hole.

This is well set forth by Judge Cushman in his opinion in the case of Union Tool Co. v. Wilson & Willard Mfg. Co., 237 Fed. 837, in the suit to restrain the manufacture of underreamers embodying the Wilson invention set forth in the patent in suit in the present case. Both these cases were heard by Cushman and decided concurrently, as is shown by Judge Cushman's opinion, 237 Fed. 847, or transcript of record on appeal in this case, page 65.

No contention that complainant invented any broadly new improvement can be sustained. It is definitely established that complainant's invention cannot be considered a "pioneer," but that on the contrary he was a mere improver in details of construction.

The devices of the patents to Edward Double, Defendant's Exhibits Double Patents Nos. 1, 2, and 3, were all produced years prior to any claimed invention by Mr. Wilson. The Double patent No. 1, number 734,833, was issued in 1903. The testimony in this case shows that the Union Oil Tool Co. manufactured these reamers from 1901 to after the date when the complainant produced his invention and put it on the market. The construction shown in Double patent No. 2 differs slightly, in certain features to which reference will hereafter be made in detail, from the showing in the first Double patent. This is also true of Defendant's Exhibit Double Patent No. 3.

Not only were these reamers on the market prior to Mr. Wilson's alleged invention, but there had been manufactured and sold in 1902 underreamers whose construction is illustrated in this case by Defendant's Exhibit "Fred W. Jones Reamer Type 2," which is known by the short title of "Jones Removable Bowl Reamer," and was referred to by Judge Cushman in his opinion on page 75 of the record.

It is to be noted in this connection that Judge Cushman finds as a fact that "these machines were manufactured and sold after the time of patenting Double's device and more than two years before the application of Wilson for the patent in suit."

All of these were successful devices for the purpose and none of them were "abandoned experiments." Each forms a part of the successful prior art and confines the scope of the Wilson invention within narrow limits. Each must be considered in determining (1) whether Elihu C. Wilson invented anything, and if so, (2) what the scope of his invention was.

While it is not one of the issues on this appeal, the fact remains that any underreamer built according to the Wilson patent in suit is a clear infringement of claims 1, 2, 6, 7 and 8 of the Double patent 734.833, "Defendant's Exhibit Double Patent No. 1," and that the Wilson reamer cannot exist apart from its embodiment thereof of the underlying basic Double invention.

In his opinion in this case Judge Cushman says:

"The particulars in which the Wilson device infringes the Double invention have already been pointed out in the decision this day filed in #1540. This marks the particulars in which the Wilson device was anticipated by the Double patent." [Record p. 70.] (In passing, it should be borne in mind that Judge Cushman here was referring solely to *Double patent* No. 1, number 734,833,—and did not refer to either Double patent No. 2 or 3.)

Let us therefore first analyze the Wilson patent and invention and ascertain what of the theretofore old and well known devices, elements and combinations Mr. Wilson appropriated and what changes he made therein. It is clear that he can secure a monopoly only of such changes.

In general terms the Wilson reamer may be described as comprising:

- (I) A round hollow body;
- (2) A pair of cutters, bits or slips;
- (3) A rod for actuating the cutters or slips;
- (4) A spring for exerting tension on the rod.

These four principal elements are found in the devices of each of the Double patents No. 1, 2 and 3 and in the "Jones Removable Bowl Reamer," and in the same operative relations to each other. As said by Judge Cushman (237 Fed. 843):

"The means adopted by Wilson of collapsing, expanding and holding the cutters in reaming position are equivalents, substantially the same as those of Double."

In the Wilson reamer the lower end of the body is provided with an open slipway at each side. This also is true of the prior Double reamers and was one of the features of novelty of the original Double invention. Each of Wilson's cutters has a shank portion which slides in its slipway in the body. This is also true of the Double prior patented reamers and was one of the features of novelty of original Double invention.

The sides of the slipways of the Wilson reamer have dovetails or shoulders and the shanks of the cutters are provided with bearing-shoulders or dovetails 42 to engage the ways 3 formed by the dovetails or shoulders on the side walls of the slipways. These correspond exactly in function with the dovetail flanges or shoulders 29 on the sides of the cutter shanks and the dovetail slipways 9 of the Double patent No. 734,833 (No. 1) and the shoulders or ridges 12 and the dovetail shoulders or lugs 14 of the Double patent 748,054 (No. 2). [Record pp. 982-987.] These were one of the features of novelty of the original Double invention.

The body of the Wilson reamer, at the ends of the open slipways 3, is provided with inclined shoulders or "beveled end faces 17" against which contact shoulders 16 on the cutters to cause the tilting action of the cutters from collapsed to expanded position. The same action takes place in the prior Double reamers and by the same general means, to-wit, the end of the body is provided with a rounded end 25 (in Double patent 734,833, No. 1), or with beveled or inclined shoulders *a* [Fig. 1 Double patent 748,054, Record p. 982] and the cutters with shoulders 26. Again we find appropriation of the Double invention by Wilson.

The Wilson reamer body is hollow to receive the reciprocating rod or mandrel 5' provided with a pivot-

key or head 5 and each cutter is provided with keyseats or recesses 18 by means of which the cutters are hung on the head of the rod and may tilt thereon. In the Double patent No. I the spring actuated rod II plays up and down in the gore of the body, the cutters each have a key-seat or socket 16, providing for the tilting action of the cutters as they hang on the rod II. Both the Wilson and the prior Double reamers have the coiled spring for actuating the rod and thereby the cutters.

There are, however, certain specific or detail structural differences between the Wilson reamer and these prior Double reamers. These are:

(1) The particular formation of the lower end of the body,—in Wilson this is a "pronged" formation terminating in "forks";

(2) A removable shoulder on which the lower end of the tension spring rests;

(3) A transference of the tilting shoulders 17 of the body from the central end portion to the extreme edges of the end of the body, i. e., to the ends of the "forks" of the "prongs";

(4) A change in the form of the cutters by transferring the location of the tilting shoulders of the cutters from the central portion of the cutters (as shown in the drawings of the first Double patent) to the extreme outside edges of the cutters and forming two separated and independent tilting shoulders 16 (required by the "pronged" or "forked" formation of the body), forming "shouldered" cutters;

(5) A transference from the central end portion of the body to the side surfaces of the prongs of the inthrust bearings against which the cutters bear when in expanded or reaming positions. (Only referred to in the Wilson patent as "spreading bearings.")

(6) The straightening of the dovetail shoulders or ways 3 and the corresponding inclining of the "spreading bearings 9."

None of these changes in form have been embodied in any of the Double improved reamers or the Type "F" reamer.

If we eliminate from consideration the specific change in interrelation of parts (to-wit, of the pronged body and shouldered cutters) and the specific change in specific mode of operation of the cutters in expansion and contraction in the Wilson reamer due to the "pronged" or "forked" formation of the end of the body (change No. I above), and to change No. 4 above, and consider this formation broadly, it is clear that such "pronged" or "forked" formation was present in and utilized in the "Jones Removable Bowl Reamer" (Defendant's Exhibit Fred W. Jones Reamer Type 2).

Judge Cushman says [Record pp 75-76]:

"This removable bowl reamer anticipated the forking of the lower extension of the patent in suit insofar as permitting the rod integral with the head or tee thereon—which carries the cutters to be inserted from the bottom is concerned. These forks in the removable bowl reamer also form ways for the cutters; but the forks in this reamer were not joined at the bottom in any way. The shanks of the cutters bore at all times against the prongs and did not collapse between them."

Mr. Wilson's conception, however, included a specific interrelation between these terminal prongs or forks of the body and the "shouldered" cutters which is not present in or utilized in this Jones Removable Bowl reamer. This detail interrelation and specific mode of operation is the production of a widened or thickened cutter shank which extends at all times in between these prongs and when the slips or cutters are in their collapsed positions the cutter shanks extend directly between these prongs, as illustrated for instance in Fig. 1 of the Wilson patent. [Record p. 977.] This is an action which was not present in any of the prior Double reamers nor in the Jones Removable Bowl reamer and an action which it is conceded is not present and has not been embodied in any of the reamers manufactured by the defendant company.

Of this feature Judge Cushman has said (237 Fed. 845):

"The effect of this changed formation, from the hollow slotted extension to the pronged formation is rather to permit of additional features and the accomplishment of further action.

The change permits the cutter shank to collapse between the prongs, which permits of more stock in the cutter shank, eliminating the notch on the inside, which is a feature of the Double cutter, above the inwardly projecting shoulder, which notch in the Double cutter is necessary to allow of the collapse of the cutter over the lower end of the extension, the web of which is unbroken. There is testimony to the effect that this notch constitutes a weakness in the Double cutter. This provision for the collapse of the cutter between the prongs is the chief additional function accomplished by the pronged formation, although it also permits of the assembling of the reamer from the bottom, instead of the top, and has an advantage in permitting the remachining of the lower end of the body of the reamer."

Judge Cushman further says [Record p. 71]:

"The main purpose of the forked formation, and the function to which it contributed, was, on the collapse of the cutters, to allow the cutter shank to swing in between the fork instead of the cutters swinging entirely over the lower end of the reamer hody. In this respect none of the devices made by the defendant encroach in any way upon the patent in suit."

Judge Cushman further emphasizes the change in specific mode of operation of the Wilson reamer in his opinion on the rehearing. He says:

"The forked formation of complainant's reamer body was essential to the complete collapse of the cutters." [Record, p. 84.]

The improvement which Mr. Wilson produced is absolutely founded on this collapse of the cutters *in between* the prongs or forks. This was a change of form made by Mr. Wilson in both the body of the reamer and in the cutters to *accomplish* this supposed improvement. This was *the essence* of Mr. Wilson's invention. The two changes of our foregoing analysis (1) and (4) are absolutely correlated to secure this possibility of the thickened shanks of the cutters and of these extending in the space between the prongs at all times and permitting the complete collapse of the cutters with the cutter shanks in the space between the prongs.

Defendant is not charged with having used this essential feature of the Wilson invention. Yet it is this interdependent relation of the prongs or forks and the "shouldered" cutters which differentiates the Wilson reamer from the Jones Removable Bowl reamer. This was the extreme limit of novelty of the Wilson invention.

This interdependence between the forked or pronged reamer body and the thickened shank cutters with their separated independent tilting shoulders 16 and separated and independent inthrust bearing faces 43 produce a specific new mode of operation (*new in the specific interdebendence*), which is the distinguishing characteristic of the Wilson reamer from the Double prior reamers and from the Jones Removable Bowl reamer. If patentable novelty is to be found in the Wilson reamer *it is in this new interdependence*. Judge Cushman recognizes this as the *important* contribution to the art by *Mr. Wilson*. He says:

"The fact that defendant did not appropriate the, perhaps, relatively more important conception of Wilson, whereby the cutter shanks were allowed to collapse between the prongs." [Record p. 79.]

Mr. Wilson, in his representations to the government upon which he secured his patent, gives another and additional advantage to the "forked" or "pronged" formation. He stated that one of the objects of his invention was

"To leave a maximum open space between the cutters to receive the loose material or sludge at the bottom of the well or other opening during the operation of drilling." [Spec. Wilson patent, Record p. 979, ll. 11-20.]

This Mr. Wilson says is accomplished by the forked formation. See record, page 980, Wilson patent specification, lines 75-83, where he refers to the location of the spreading bearings 9 and says:

"Said bearings are at the sides of the lower ends of the body, thus engaging the outer edges" (only) "of the cutters to hold the cutters apart and leaving an open space between the middle portions of the cutters for a greater distance upward from the lower ends of the cutters than would be the case were the cutters held apart by any intermediate portion between the lugs."

(It is to be noted that this matter was introduced into Mr. Wilson's application for his patent by the amendment D [Record pp. 1044-1049, particularly top of p. 1046]. The patents to Double had been cited against Mr. Wilson's application. The patent office had no knowledge of the Jones Removable Bowl reamer and could not and did not cite that.)

None of defendant's reamers have ever been modified to secure this object of Mr. Wilson's improvement. On the contrary all of them have "the cutters held apart by an (y) intermediate portion between" the cutters. So has the Jones Removable Bowl reamer. The two advantages novel to Mr. Wilson from the "pronged" or "forked" formation in combination with the "shouldered" cutters are:

(1) The strengthening of the cutter shanks which swing in between the forks and at all times are between the forks.

(2) The provision of the open space at the centers of the cutters and between the cutters, leaving a maximum space to receive loose material.

It has been found by Judge Cushman and cannot be denied by complainant that none of defendant's reamers embody either of these advantages.

Judge Cushman says [Record p. 75]:

"So that, in any event as long as the defendant has confined itself to the original outline of its structure, there is no infringement of this claim."

In none of defendant's reamers has the lower end of the reamer body been entirely cut away at the center to provide a space in which the shanks of the cutters may swing between the prongs formed by such cutting away. Even in Type "F," as referred to by Judge Cushman, the lower end of the reamer has a bearing formed partly of the metal at the end and partly by the removable block, corresponding to the removable block to of Defendant's Exhibit Double Patent No. 3 [Record pp. 988-993], two views of which are set forth as a part of Judge Cushman's opinion on page 74 of the record.

The presence of this continuous bearing across the end of defendant's reamers prohibits the formation of this open space between the middle portions of the cut-

ters referred to by Mr. Wilson in his patent specification. It is thus seen that not only does the retention of this original formation of the body of the Double reamer prohibit the strengthening of the cutter shanks in the manner of Mr. Wilson's conception, but also the swinging in between any prongs or forks of the shanks of the cutters so that neither of the two advantages referred to have been appropriated by defendant in any of its reamers. These being the two novel advantages, the novel *results* secured by the forked or pronged formation and the "shouldered" cutters, and being the differentiation between the Wilson invention and the prior art as illustrated by the Double patents and the Iones Removable Bowl reamer, it is clear that the patent upon Mr. Wilson's invention must be limited to this novel detail or change of interrelation of these two elements and to the specific mode of operation or change in mode of operation thus produced by this novel interrelation, which specific mode of operation or specific change in the mode of operation is the distinguishing feature of and the new result secured by the Wilson invention. The Wilson patent must be so limited that it may not embrace what was part of the prior art.

A careful reading of the description of the Wilson specification fails to disclose any other advantages sought to be accomplished by Mr. Wilson's invention, or to show a description of any such advantages, and, as we shall point out in detail, Mr. Wilson has not *claimed* any such other advantage, but on the contrary has specifically and intentionally limited all of the claims of his patent to these advantages. The Wilson patent was evidently drawn with the distinct and avowed purpose of limiting the claimed novelty of the Wilson invention to these two advantages.

If the novelty of the alleged Wilson invention is adjudged to be sufficient to be entitled to any application of the doctrine of equivalency to any of the claims of the Wilson patent, or in particular to claims 9 and 19, then such application must be limited and characterized by this particular change in co-operative relation and principle of action of the pronged or forked body and the "shouldered" cutters and the interrelation of such prongs to the movement of the cutter shanks *in between* such prongs, as this was the distinctive feature and new result of such co-operation, relation, change of form and location of the parts.

If either claim 9 or 19 of the Wilson patent is entitled to any application of the doctrine of equivalency, clearly such claim is not entitled to such a broad interpretation as would render the respective elements of the prior Double reamers of Double patents Nos. 1, 2 or 3, respectively, or of the prior Jones Removable Bowl reamer, equivalents, in the absence of any modification thereof to secure either of the advantages of the changes upon which Wilson's invention is so predicated.

In other words, such application of the doctrine of equivalency must be so specific as to eliminate and remove as nonequivalents the pronged formation and the form of cutters of the Jones Removable Bowl reamer, and the continuous bearing for the cutters and the continuous bearing on the cutters of the Double reamers. No claim in the Wilson patent can be valid which is so construed as to cover either of these. Both were prior.

Judge Cushman finds that the Jones Removable Bowl reamer "anticipated the lower extension of the patent in suit so far as permitting the rod integral with the head or tee thereon—which carries the cutters—to be inserted from the bottom is concerned. These forks in the removable bowl reamer also form ways for the cutters." [Record p. 75.]

Of the same prior reamer he also said: "The shanks of the cutters bore at all times against the prongs and did not collapse between them." [Record p. 75.]

The collapse of the cutters with the shanks in between the prongs or forks, then, was the essential change in the mode of operation and the new result. No elements could be equivalents which did not provide for this change in the mode of operation and new result.

Judge Cushman has found that none of defendant's reamers "appropriate the, relatively, more important conception of Wilson; whereby the cutter-shanks were allowed to collapse between the prongs. [Record p. 79.]

If then the new result of the "pronged" or "forked" formation and of the "shouldered" cutters was the two advantages heretofore pointed out, both incident to providing for the cutter shanks working in between the prongs of the body, and defendant has not appropriated this distinguishing feature it clearly has not infringed.

On this appeal defendant may stand on the facts as found by Judge Cushman. Defendant does not need to

ask this court to overrule a single finding of fact. It is defendant's contention that Judge Cushman's decision as to claims 9 and 19 was based on an entire misunderstanding and totally erroneous interpretation of the subject matters as well as the legal effect of these claims; that Judge Cushman construed each of these claims 9 and 19 as addressed to a subject matter neither mentioned therein nor set forth in the Wilson patent as one of Mr. Wilson's improvements nor within the true scope or interpretation of such claims. That as construed by Judge Cushman such claims would also be wholly anticipated and void, and then, further, that in fact the defendant has never used what Judge Cushman construed these claims to cover. That he overlooked in his final analysis, even on the theory of his opinion, the distinguishing factor between that to which he addresses his charge of infringement and that which is actually used by defendant.

In order to understand either claim 9 or 19 it is not only necessary that the court should fully understand the change made in the particular formation of the lower end of the body of the reamer by making it "pronged" and terminating in "forks," and bear fully in mind that such pronged and forked formation *per se* was found in the prior "Jones Removable Bowl Reamer," but it is also necessary that the court should fully understand the change in the form of cutters made by transferring the location of the tilting shoulders of the cutters from the central portion of the cutters (as shown in the drawings of the first Double patent) to the extreme outside edges of the cutters and forming the same as two separated and independent tilting shoulders 16. It is the interrelation of these "shouldered" cutters and the pronged or forked formation which alone constitute the novelty of the Wilson invention and which is the thing claimed in claims 9 and 19.

A study of the history of the application for the Wilson patent and of the specification of such patent discloses the fact that claims 9 and 19 are drawn to this specific interrelation of the pronged or forked formation of the body of the reamer and the "shouldered" cutters. That this is the subject-matter to which each of these claims is addressed. That without doing violence to the clear import of such claims the court cannot ignore the definite and certain limitations of each of these claims to the pronged or forked formation and to the "shouldered cutters" as distinguished from the prior reamer bodies and cutters.

The feature of the cutters of the Wilson patent which is dwelled upon by the testimony of complainant and of his brother, W. W. Wilson, as forming the improvement over the cutters of the devices of the re spective Double patents Nos. I, 2 and 3 and of the Jones Removable Bowl reamer is the transference of the tilting shoulder 26 of the Double patent No. I from the front face of the cutter and the division of this shoulder into two separate and independent shoulders (16, Wilson patent) arranged at the sides of the cutter, thus permitting the shank of the cutter to be thickened and strengthened and avoiding the weakening of the cutter caused by cutting the V-shaped notch to form the tilting shoulder 26. As we have already pointed out, this transference of the tilting shoulder to the sides of the cutter and the formation of such shoulders 16 as independent and separated shoulders, with the shank of the bit extending inwardly beyond the plane of such shoulders and beyond the plane of the bearing faces 43 formed on the inner faces respectively of such shoulders required the elimination of the center portion of the web at the bottom of the Double reamer, thus creating the pronged or forked formation. Without such pronged or forked formation Wilson's "shouldered" cutter cannot be used, and without such "shouldered" cutter the pronged or forked formation has no new or advantageous result and is clearly anticipated by the Jones Removable Bowl reamer.

As said by Judge Cushman, in his opinion in 237 Fed. page 845, these two features are necessarily interrelated and the effect of the changed formation (to the forked or pronged form) is to permit of these additional features and the accomplishment of this further action. Judge Cushman says further:

"The change permits the cutter shank to collapse between the prongs, which permits of more stock in the cutter shank, eliminating the notch on the inside, which is a feature of the Double cutter, above the inwardly projecting shoulder, which notch in the Double cutter is necessary to allow of the collapse of the cutter over the lower end of the extension, the web of which is unbroken. There is testimony to the effect that this notch constitutes a weakness in the Double cutter." (237 Fed. 845.) The original application of Mr. Wilson was rejected by the commissioner of patents upon the Double patents.

A careful study of the history of the application for the Wilson patent discloses the absolute limitation of these claims to this interrelation of the forked or pronged formation of the body and the particular construction of the shouldered cutters. This record appears in the transcript of record, pages 1023 to 1075.

It will be noted particularly that the statement, in the specification of the Wilson patent as issued, contained in lines 16 to 20, transcript, page 79, to which reference has already been made, and setting forth that one of the objects of the invention was "to leave a maximum open space between the cutters to receive the loose material or sludge," etc., was inserted by the last amendment to the specification and claims. See amendment E, page 1052 of the record, this matter appearing at the bottom of said page. In this connection it will be noted that claim 19 was submitted in connection with this amendment.

Not only was this statement of the object and function of this interrelation between the forked formation and shouldered cutters inserted by this amendment *to differentiate from the Double prior reamers* and to secure an allowance of the Wilson application, but it is to be noted that by the prior amendment D [Record pp. 1044-1048, particularly top of p. 1046], the two terminal paragraphs of the specification of the Wilson patent were inserted, these paragraphs appearing in the patent in lines 63 to 90, page 980, of the record. That amendment also was for the purpose of differentiating from the prior Double reamers and set forth

this feature of cutting away the center of the web of the Double reamer and the transference of the tilting shoulders to the sides of the cutter and forming the same as independent and separated shoulders so that a maximum open space between the cutters was provided to receive the loose material or sludge. The drawings of the Wilson application were amended in this connection. The original drawings as submitted upon the filing of the application are shown on pages 1057-58 of the record. Referring to page 1058 and to Fig. 9 and comparing the same with the two sketches submitted by the amendment appearing on pages 1055-1056 of the record, and comparing the same with Fig. 9 as it appears in the Wilson patent [Record p. 978], it will be seen that this figure of the drawing was amended by adding two horizontal lines, one connecting the lower ends of the edge lines of the shank of the cutter and the other connecting such edge lines to indicate the angle in the face of the shank of the cutter, as shown in the side view, Fig. 8, bringing forth directly into the drawings the two tilting shoulders 16 and their separated conditions.

In this amendment E Mr. Wilson called particular attention as follows:

"The Double cutter has its bearing face entirely across the cutter instead of on the inner side of the shoulders at the sides of the shank as specified in these claims." [Record p. 53.]

That the allowance of the Wilson patent and claims was secured upon the representations of Mr. Wilson to the examiner and that he relied upon this interrelation between the termination of the body portion in prongs forming a fork and this "shouldered cutter feature" appears from the record, page 1047, where it is said:

"The Double patent certainly does not cover on the reamer terminating in prongs forming a fork. He apparently quite overlooks the difference in the construction of the two reamers. I will ask you to again request the allowance of that claim."

In connection with this last referred to argument we call attention to the fact that in order to avoid the rejection on reference to the prior Double patents the Wilson specification was amended in three important particulars. [See p. 1045 of the record.]

Referring to the Wilson patent as issued it is found that this amendment inserts the matter in lines 76-81, page 979 of the record, and lines 92 to 104, same page, and inserts the last two paragraphs of the specification, record page 980, commencing with line 63 and terminating in line 90. The last paragraph thus inserted is of extreme importance in understanding the subjectmatter of claims 9 and 19 and in understanding the reference to the *two shoulders* on each cutter. This paragraph, so inserted by Mr. Wilson to differentiate from the Double cutter, is as follows [Record p. 1046]:

"I term the cutters 'shouldered cutters' for the reason that the rounded corners 16 which extend away from the shank at right angles thereto are in the nature of shoulders, the inner faces 43, of which engage the spreading faces 9 of the side lugs 2' to brace the cutters and hold them apart." In this connection the court's attention is directed to the opinion of Judge Cushman in which he discusses the effect of these amendments, although not applying the effect of these amendments except as to claims 16 and 17, see particularly page 68 of the record. As said by Judge Cushman:

"The effect of this amendment to the drawings was to make plain that the inner bearings on the face of the cutters were out nearest its lateral face entirely beyond the perpendicular sides of the shanks."

Thus showing the thickened shank extending inwardly beyond the shoulders 16.

Not only do the amendments above referred to apply to claims 16 and 17 and estop the patentee Wilson from avoiding the clear limitations and restrictions thus placed upon such claims, but such amendments clearly are an interpretation of the same language and terms when appearing in other claims of the patent. For it was upon these representations and upon these amendments both to the specification and to the drawings that the Wilson patent was allowed and granted by the patent office.

To permit Mr. Wilson to now contend for a different meaning of the words used in his claims from the meaning asserted by him and the definition given thereto by him, is to change the contract as made by him and the patent office. As said by the court in Quinn v. J. H. Faw, Inc., 235 Fed. 166-169:

"The case is the common one in which the applicant assents to conditions imposed in the patent office, and then, having got his patent, tries to expand it to cover exactly what he agreed it should not. Such a game of hide and seek the courts have always refused to allow. He had his remedy by appeal, and only by appeal, if the examiner was wrong."

As said by the Circuit Court of Appeals in Strause Gas Iron Co. v. Crane Co., 235 Fed. 126:

"A limitation imposed by the patent office to distinguish from prior references, and accepted by the applicant, cannot be disregarded, although it may have been unnecessary."

"A careful scrutiny of the action in the patent office leaves us no doubt that this was the meaning attributed to the phrase by the examiner, and that it was only when the phrase with that meaning was inserted in the two claims that he would allow them."

We will point out the fact hereafter that claim 19 is an exact duplicate of claim 16 in its wording in respect to the element of the cutters. The limitation to "shouldered" cutters in the sense defined by Mr. Wilson to the patent office was necessary to distinguish from the prior Double cutters. The interpretation and meaning placed by Mr. Wilson upon the terms used by him is clearly binding upon him and must be adjudged the meaning of these terms wherever they appear in the patent thus afterwards issued to him.

As said by Circuit Judge Knappen, speaking for the Circuit Court of Appeals for the Sixth Circuit, in Michigan Engine Valve Co. v. Monarch Mfg. Co., 233 Fed. 107, 110:

"We think it clear that claims I and 2 of the patent in suit must be construed as limiting the pin centrally-projecting from the securing plate as formed integral therewith; for, conceding that there was nothing in the patent office rejection of the claims on reference to Morgan which made it necessary to limit the claims to a pin formed integral with the plate, and that such limitation was not necessary to patentability, yet an intentional limitation is none the less effective because selfimposed or unnecessary. McLain v. Ortmaver, 141 U. S. 419, 425; Cimiotti v. American Co., 198 U. S. 399, 415. * * * The intention to limit to an integral construction seems the more obvious from the facts that the specification states that the pin 'is preferably formed integral with the plate,' and that the original claims made no mention of integral construction-the use of the word 'integral' in the substituted claims thus raising the natural inference that the word was intended in the same sense as used in the specification, viz.: 'formed integral with the plate.' "

After a rejection of the Wilson application on reference to the patent to Swan and Double [Record pp. 1035-36] Mr. Wilson amended his application. By this amendment B he submitted two claims [Record p. 1040] as 16 and 17. These two claims were rejected on the Double patents and cancelled in view of such rejection and claims 16 and 17 of the Wilson patent substituted therefor. These two cancelled claims throw great light on the specific character of the language used in claims 16. 17, 19 and in claim 9. These cancelled claims were: "16. An underreamer cutter having shoulder or projections on its sides to form bearings to rest on the lugs of the underreamer body."

"17. An underreamer cutter having shoulders to bear on the lugs of the underreamer body, and having shoulders or projections on its sides to bear against the shoulders on the inner faces of prongs of underreamer body when cutters are expanded to normal position for reaming."

These claims were rejected on reference to the Double patent No. 2, number 748,054. [Printed in Record pp. 982-987.]

For these claims, claims 16 and 17 of the patent were substituted by the next amendment [Record p. 1048] and were thereafter rejected [Record p. 1051], the patent office stating:

"The examiner is unable to see wherein claims 16 and 17 distinguish from Double, 748,054, of record, and said claims are accordingly rejected."

Mr. Wilson then makes the amendments to the drawings and to his specification to which attention has already been specifically directed. The drawings were amended to more clearly show that the shoulders 16 and bearing-faces 4³ of the cutters were arranged at the sides of the shank and as separated and independent of each other, with the thickened cutter-shank extending outward beyond the plane of these shoulders and bearing-faces and in front thereof. Mr. Wilson then says:

"The Double cutter has its bearing-face entirely across the cutter instead of on the inner side of the shoulders at the sides of the shank as specified in these claims." The original claims 16 and 17 did not specifically limit the construction claimed in the manner thus referred to by Mr. Wilson, and might possibly have been held to not be so limited to the separated shoulders 16 and bearing-faces 4³ on the sides of the shank. Claim 19 is submitted to the patent office by Mr. Wilson in connection with this last quoted statement and amendment.

Judge Cushman has decreed that none of defendant's reamers infringe either claims 2, 4, 8, 10, 11, 12, 13, 14 or 15, as well as claims 16 and 17. Judge Cushman has decreed that none of defendant's reamers have "an underreamer body terminating in two prongs" and he has directly held that the Jones Removable Bowl reamer did have "an underreamer body terminating in two prongs." Thereafter such a construction was not new at the time of Mr. Wilson's invention. Yet if we take claim 19 of the Wilson patent we find it calls for two elements only:

(1) A body terminating in two prongs.

(2) Cutters each having two shoulders and a bearing-face on the inner side of each of the two shoulders.

The first element is the underreamer body covered by claims 2, 4, 10, 11, 12, 13, 14, and which Judge Cushman decrees defendant has not embodied in any ot its reamers. Does it not then follow of necessity that it must be by reason of the second element of this 19th claim that infringement was found? If so we find an absolute inconsistency in such finding. The second element is identically claim 16 which Judge Cushman has found defendant does not infringe! The decree appealed from specifically finds, as does Judge Cushman's opinion, that none of the reamer cutters manufactured or sold by defendant have embodied the construction set forth in either claim 16 or 17. Compare now the second element of claim 19 and claim 16. They are:

Claim 19.	Claim 16.
Cutters each having	An underreamer cutter
two shoulders	having
and	two shoulders
a bearing-face on the	and
inner side of each of the	a bearing-face on the
two shoulders of the	inner side of each of the
cutter.	two shoulders.
	(To engage said prongs.)

How logically can this same language mean two different things when addressed as it is to the same mechanical construction and when it was used by the same person and its meaning stated in the argument upon which both claims were allowed?

The words of description in these two claims are found to be identical. No rule of construction is better established than that such words must mean the same thing and have the same meaning, when used with reference to the same instrumentalities—either in a contract, a statute or in two claims of a patent. Thus the lower court has found that none of defendant's reamers embody the cutters called for by these claims, *and* that none of defendant's reamers embody the bodies called for by claim 19. Does it not necessarily follow that none of defendant's reamers has the combination of which these particular construction of cutters and this particular form of body form the parts or elements?

Defendant submits that it is clear, definite and certain, and does not require construction or interpretation to show that claim 19, by the intentional wording (deliberately chosen by Mr. Wilson to differentiate the invention he claimed from the prior Double inventions), is limited (first) to the underreamer body

"terminating in two prongs,"

and that the function of such pronged formation as set forth by Mr. Wilson and as found by Judge Cushman is made a part of this element of the claim and made an essential and necessary part of the mode of operation of the combination, and without which no infringement is possible, and *(second)* is limited to the "shouldered" cutters adapted to swing in between such prongs.

As Judge Cushman has directly found that neither of defendant's "Double Improved" nor "Type F" reamers contain *either one* of these two elements no infringement exists. To find infringement *both* of these features must be found to exist in combination in defendant's reamers, and must be found to have in defendant's reamers the features thus specified as distinguishing the combination from what preceded it, to-wit: the feature of novelty which attends such pronged formation, i. e., the separation of the expansion bearings or "spreading bearings" (as they are termed in the Wilson patent), into separate and independent parts or portions, *spaced apart from each* other, and the "shouldered" cutter formation (1) to permit of increased depth of cutter shanks, thereby strengthening the cutters, (2) the swing of the cutter shanks at all times between the prongs or forks, and (3) the leaving "an open space between the middle portions of the cutters for a greater distance upward from the lower ends of the cutters than would be the case where the cutters held apart by any intermediate portion of the lugs." (In all of defendant's reamers this intermediate portion referred to is at all times present and between the cutters.)

"It is not within the rightful power of the courts to enlarge or restrict the scope of patents which by mistake were issued in terms too narrow or too broad to cover the invention, however manifest the fact and the extent of the mistake may be shown to have been."

U. S. Repair & Guaranty Co. v. Assyrian Asphalt Co., 183 U. S. 342.

"It is the province of the inventor to make his own claims, and his privilege to restrict it."

Fay v. Cordesan, 109 U. S. 408.

The specific language of claims 9 and 19, in view of the description of the Wilson patent and the proceedings before the patent office, forms definite and certain limitations voluntarily made by Mr. Wilson and cannot be ignored. As said by the Supreme Court in

Keystone Bridge & Iron Co. v. Phoenix Iron Co., 95 U. S. 274, 278:

"Here again the patentees clearly confine themselves to 'wide and thin bars.' They claim the use in truss bridges of such bars when the ends are upset and widened in the manner described. It is plain, therefore, that the defendant company, which does not make such bars at all, but round or cylindrical bars, does not infringe this claim of the patent. When a claim is so explicit the courts cannot alter or enlarge it. If the patentees have not claimed the whole of their invention, and the omission has been the result of inadvertence, they should have sought to correct the error by a surrender of their patent and an application for a reissue. They cannot expect the courts to wade through the history of the art and spell out what they might have claimed. Since the act of 1836, the patent law requires that an applicant for a patent shall not only, by a specification in writing, fully explain his invention, but that he 'shall particularly specify and point out that part, improvement, or combination which he claims as his own invention or discovery.' This provision was inserted in the law for the purpose of relieving the courts from the duty of ascertaining the exact invention of the patentee by inference or conjecture, derived from a laborious examination of previous inventions, and a comparison thereof with that claimed by him. This duty is now cast upon the patent office. There his claim is, or is supposed to be, examined, scrutinized, limited, and made to conform to what he is entitled to. If the office refuses to allow him all that he asks, he has an

appeal. But the courts have no right to enlarge the patent beyond the scope of its claim as allowed by the patent office, or the appellate tribunal to which contested applications are referred. When the terms of the claim in a patent are clear and distinct (as they always should be) the patentee, in a suit brought upon the patent, is bound by it. Merrill v. Youmans, 94 U. S. 568. He can claim nothing beyond it. But the defendant may at all times, under proper pleadings, resort to the prior art and general history of the art to assail the validity of a patent or to restrain its construction The door is then opened to the plaintiff to resort to the same kind of evidence in rebuttal: but he can never go beyond his claim. As patents are procured ex parte, the public is not bound by them, but the patentees are. And the latter cannot show that their invention is broader than the terms of their claim; or, if broader, they must be held to have surrendered the surplus to the public."

The contentions of complainant and the decision of the court below are against the settled rules of construction and fall within the denunciation of the Supreme Court in

White v. Dunbar, 119 U. S. 47:

"Some persons seem to suppose that a claim in a patent is like a nose of wax, which may be turned and twisted in any direction, by merely referring to the specification, so as to make it include something more than, or something different from, what its words express. The context may, unquestionably, be resorted to, and often is resorted to, for the purpose of better understanding the meaning of the claim; but not for the purpose of changing it, and making it different from what it is. The claim is a statutory requirement prescribed for the very purpose of making the patentee define precisely what his invention is and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms. This has been so often expressed in the opinions of this court that it is unnecessary to pursue the subject further."

Defendant had the right to take the formal statement of Mr. Wilson that what he claimed as his invention was the "pronged" or "forked" construction of body in combination with the "shouldered" cutter construction, as defined by him before the patent office. Defendant has never made, used or sold an underreamer embodying such a construction or having the function of the pronged or forked construction. Judge Cushman has so found. Defendant has never made, used or sold an underreamer having a cutter embodying such "shouldered" cutter formation. Judge Cushman has so found. It is clear that the court was not justified in eliminating these limitations from claims 9 and 19 in order to make them embrace and cover "something different" from what Mr. Wilson has actually claimed. (And this is true regardless of whether what Judge Cushman found as the infringement was in fact novel in the Wilson invention, or was in fact utilized by defendant. Both of which propositions are denied by defendant.) The situation might be different if any device of defendant's had any element having the equivalent (in function and interrelation to the other parts claimed in the combination)-of (1) the forked or pronged construc-

tion and of (2) the "shouldered" cutter construction. But in testing such question of equivalency, the test is the change in interrelation and function brought about by the change from the old Double and Jones constructions to the "pronged" or "forked" construction in combination with the change to the "shouldered" cutter formation. The particular changes in these functions and the particular advantages and new results thereof have heretofore been pointed out. Judge Cushman has distinctly found that neither of them exists in any of defendant's reamers. Judge Cushman has distinctly found that these distinguishing features of the combination thus claimed by claims 9 and 19 are not to be found in any of defendant's reamers. To be equivalent to the pronged or forked construction, the substituted element must have the functions and attributes of that construction, i. e., the separation of the tilting shoulders and spreading bearings apart and wholly at the outside of the reamer body so that an open space is left between such shoulders and bearings; also such a "shouldered" cutter formation, that the shanks have the thickened and strengthened feature, and swing in between the prongs, utilizing this change in the mode or principle of operation or action. This Judge Cushman has found not to exist in any of defendant's reamers.

Your Honors in the case of Hardison v. Brinkman, 156 Fed. 962, say:

"A patentee is bound by his claims and cannot claim a broader invention than that which he has specifically described therein, even though he may have been entitled to make broader claims." "It is not necessary to inquire whether Hardison has by his claims unnecessarily limited his invention, or whether he might have so worded the same as to cover the combination which is adopted by the appellee. He must be held to the combination which is described and claimed so explicitly."

No application of the doctrine of equivalency can relieve complainant from this deliberate limitation of each and all of the claims of his patent to the pronged or forked construction with the function resulting therefrom and to the "shouldered" cutter formation, and the function resulting therefrom, or from the function resulting from the combination of these two. In other words, it is necessary even with a broad and liberal application of the doctrine of equivalency to find in the alleged infringing device such a formation of the underreamer body as to have the function of the forked or pronged construction (and the function wherein it differed because "forked" or "pronged" from the continuous web formation), which function has been found by Judge Cushman to be to—

"allow the cutter shank to swing in between the fork instead of the cutters swinging entirely over the lower end of the reamer body"

and to find in the alleged infringing device the "shouldered" cutter formation (as defined by Mr. Wilson in distinguishing such "shouldered" cutter formation from the Double cutter), and the change in function which this particular change to "shouldered" cutter formation has accomplished in combination with the "pronged" or "forked" formation.

A device to be an equivalent must perform substantially the same function in substantially the same manner as the one for which it is substituted. It is necessarv, therefore, to first ascertain the novelty of function and interrelation and then test equivalency by the presence or absence of the newness of construction and function in the association of elements. The test is, has the cutter element, so sought to be held as an equivalent, the general shape and construction that when associated with the body, the two have the improved relation and function claimed by Mr. Wilson? Inasmuch as it cannot be claimed that defendant has ever departed from the construction in which the cutter "has its bearing-face entirely across the cutter instead of on the inner side of the shoulders at the sides of the shank" [Wilson's differentiation of the claimed cutter formation from the Double, Record p. 1053], it cannot be claimed that any of defendant's cutters are the equivalent of the cutters claimed in claims 9 or 19. This alone then would negative the charge of infringement. But it must also be remembered that the other element of the claim is the forked or pronged body construction. Judge Cushman has also held that defendant has never utilized that.

Whether claims 9 and 19 are considered solely from the view point of their specific limitations, i. e., (1st) to the termination of the underreamer body in a fork having prongs and to the consequent function of such pronged formation, or (2nd)—to the "shouldered" cutter formation with the bearing face on the inner side of each shoulder and separated by the shank extending (unbroken or non-notched) inward beyond the plane of the shoulders 16 and bearing faces 43, or (3rd)—to the combination of these two features together, and therefore to both of the limitations, and their inherent independence in function and result (which is doubtless the true interpretation of both claims 9 and 19), infringement does not exist.

In his specification, Mr. Wilson says:

"I so construct the mouth of the underreamer as to dispense with stock between the collapsed cutters, thus enabling the cutters to close together." [Lines 33-35, p. 979 of Record.]

"Thus * * * leaving an open space between the middle portions of the cutters for a greater distance upward than would be the case were the cutters held apart by an intermediate portion between the lugs." [Lines 74-90, p. 980 of the Record.]

(As is the case with all defendant's reamers and with the prior Double reamers, i. e., the intermediate portion of the web is at all times between the cutters.)

We thus find that Mr. Wilson has described another alleged advantage of his forked body and shouldered cutter construction. *But* this advantage has not been copied by defendant. This is emphasized at this point, as we have already seen that none of the representations and distinctions upon which Mr. Wilson actually secured the allowance of the claims by the patent office apply to defendant's reamers, but exclude all of defendant's reamers. On the contrary each of these was an effort by Mr. Wilson to point out distinctions between what he claimed to be his invention and what Mr. Double had produced and defendant's predecessor has used, which is also what defendant has continued to use. We find that Mr. Wilson has specified in his patent all the advantages he believed his invention possessed over the prior art. Is it not significant that nowhere in the Wilson patent is there any mention of the feature which has been held by Judge Cushman to be a part of Wilson's invention and to have been appropriated by defendant?

But let us parallel for comparison claim 19 and the findings of fact of Judge Cushman. Mayhap, it will throw some light upon the interpretation given to claim 19 by Judge Cushman or demonstrate the error of the decision of the lower court.

CLAIM 19:

An underreamer comprising

(1) a body terminating in two prongs.

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COURT'S FINDINGS:

"The main purpose of the forked formation, and *the function* to which it contributed, was on the collapse of the cutters, to allow the cutter shank to swing in between the forks instead of the cutters swinging entirely over the lower end of the reamer body. *In this* respect *none* of the devices made by the defendant encroach upon the patent in suit." [Record p. 71.]

(2) cutters each having two shoulders and a bearing-face on the "By this action and upon familiar principles of estoppel, the claims inner side of each of the two shoulders to engage said prongs. were clearly limited and restricted to a cutter with the inner bearings confined to its sides and not extending across its face. In all of defendant's alleged infringing devices, the bearings extend all the way across the cutter." Record pp. 68-69.]

Judge Cushman has held that defendant has not infringed any of the claims which call only for the first element per se; that none of defendant's reamers embody such a pronged construction. Judge Cushman has also held that none of defendant's reamers infringe either of the claims which call for the second element of this claim per se; that none of defendant's reamers embody such a "shouldered" cutter. If correct in such decisions, how can we reconcile the finding that claim 19 is infringed? Clearly it is entirely antagonistic to his other findings. It will be found that such infringement was predicated by Judge Cushman upon a theory of a complete and total reconstruction of claim 19 to make it cover something which Judge Cushman believed to be a part of Mr. Wilson's invention, but which Mr. Wilson never claimed. This is a clear. positive and distinct violation of the rule that the courts are to construe the claims, not to remodel or redraft them. Not to mold them "like a nose of wax." (White v. Dunbar, supra.)

Judge Cushman's decision that defendant has iniringed claims 9 and 19 is most definitely shown by his opinion not to be predicated upon any theory whatever that defendant has used the novelty and invention found by him to reside in this "pronged" or "forked" formation of the body, with its peculiar or particular function, or the "shouldered" cutter, with its special interrelation to and function in combination with the "pronged" body, so definitely specified in these claims, or to possess any of the advantages or benefits asserted for these particular constructions or interrelation of parts or to secure the new result attributed to them by Mr. Wilson in his patent.

Not only is this shown by the portions of Judge Cushman's opinion heretofore referred to but by reference to his opinion respecting claim 8.

Judge Cushman specifically holds that defendant has not infringed either claim 8 or claims 2, 4, 12, 13 or 14:

"As long as defendant has confined itself to the original outline of its structure." [Record p. 75.]

And also says:

"In any event with the detachable bolt (11) between the prongs in Wilson's device, the cutters are permitted to callapse between the prongs." [Record p. 75.]

It is thus seen that all the way through Judge Cushman's decision the particular feature of novelty and advantage of the "pronged" formation and of the "shouldered" cutters was the permitting of the cutter shanks to collapse *between* the prongs and occupy the open space between the ends of the prongs, thereby securing the advantages attributed by Mr. Wilson to

such formation and upon the assertion of which Mr. Wilson secured the allowance of the claims by the patent office. It must be borne in mind at all times that when Mr. Wilson adopted this differentiation of his structure (as a "pronged" body and as "shouldered" cutters) he used these differentiations to distinguish the formation theretofore produced by Mr. Double and used by defendant's predecessor in business, Union Oil Tool Company, and by defendant in all of the underreamers manufactured and sold by the defendant. Judge Cushman finds that defendant has never made or sold a reamer which permitted the cutters to collapse between the prongs of the body. We submit his decision as to infringement of claims 9 and 19 is based on a misconception of the rules of interpretation and of the "doctrine of equivalency."

Judge Cushman says:

"Passing to claims 9 and 19, it has already been found that, *as ways* for the cutter to slide, or ride on, the faces of the prongs and lugs were no more than equivalents of the ways found in the Double invention." [Record p. 76.]

Here Judge Cushman clearly refers to his opinion in Union Tool Co. v. Wilson & Willard Manufacturing Co. (237 Fed. 837, particularly page 845), construing the breadth of novelty of the original Double invention of patent No. 738,833 ("Defendant's Exhibit Double Patent No. 1" herein).

Judge Cushman found this Double invention to be broadly new. He said:

"The main question in the case is: What range of equivalents, if any, is complainant entitled, under the patent in suit, to be protected against? Upon consideration of the prior art, including the alleged anticipating patents and devices, and the marked success in the trade and in operation of the Double underreamer, *I find that it constituted* combinations of decided merit, entitling complainants to a fair range of equivalents." (237 Fed. 839.)

Within the broad scope of the novelty found in the Double invention and tested by such broad novelty the Wilson construction and interrelation of parts were substantially the same and the body, and cutters, the tilting shoulders, the open slipways with their dovetails and the interrelated dovetails on the cutters, of the Wilson reamer, each performed its function in the reamer, *in substantially the same manner* as in the particular embodiment of the Double invention shown and described in the Double patent. This was Judge Cushman's finding in said suit.

But Judge Cushman has not found and could not find that in any of defendant's reamers defendant had used a "pronged" or "forked" formation of body within the meaning of such a construction as differing from the prior bodies or as having the newness in mode of operation or of change of function or of mode of operation, or newness of interrelation with the cutters, interjected into or produced in an underreamer by such change from the bodies of the prior art to such "pronged" or "forked" body. Nor has Judge Cushman found nor could he find that in any of defendant's reamers defendant had used a "shouldered" cutter formation within the meaning of such construction as differing from the cutters of the prior art or having the newness of mode of operation or of change of function or of mode of operation or interrelation to the "pronged" or "forked" body, interjected into or produced in an underreamer by such change from the cutters of the prior art to such changed "shouldered" cutters. This was the test of equivalency to be applied to this Wilson invention.

The question was and is: Has defendant in its reamers used a "pronged" or "forked" body and "shouldered" cutter which embodies *this changed* function, mode of operation and interrelation thus created by the changes from the prior art bodies and cutters and producing this new interdependence?

The test of equivalency in the case at bar is not, are the body, cutters, etc., of the Wilson reamer the mechanical equivalent of those of the Double invention viewed in the breadth of the Double invention, but has defendant's reamer adopted the changes in function, mode of operation, and interrelation of parts (as to body, cutters, etc.,), that was produced by Mr. Wilson and which distinguish Mr. Wilson's production from the prior underreamer bodies, cutters, etc.

Defendant submits that this is not the test applied by Judge Cushman in his decision as to claims 9 and 19, and that therein he has erred. The question for him to have determined in this case was:

Considering the novelty of the changes made by Mr. Wilson from the prior art to the "pronged" or "forked" body and the interrelated "shouldered" cutters, with their function of swinging in between the forks or prongs of the body, for the purposes set forth by Mr. Wilson, has defendant used in this sense devices which are substantially the same in this modified function and mode of operation?

Such question must necessarily be tested by and characterized by the changes which Mr. Wilson made in such body and cutters and the changes in function and interrelation produced by such changes in function, and by the new result produced by such changes.

Judge Cushman has found these Wilson changes to produce certain changes in function and mode of operation. He finds that *the function* to which the "forked" or "pronged" body contributed was "on the collapse of the cutters, to allow the cutter shank to swing in between the forks instead of the cutters swinging entirely over the lower end of the reamer body." [Record p. 71.] Judge Cushman has explicitly found that "In this respect none of the devices of the defendant encroach upon the patent in suit."

This finding is directly that none of the bodies of defendant's reamer are *equivalent* to the bodies of a reamer embodying the Wilson invention, for the reason that none of them contained this function. We have already pointed out Judge Cushman's finding that none of defendant's underreamer cutters have the "shouldered" cutter formation or its equivalent, as distinguished from the Double formation with the notch in the shank of the cutter.

Defendant submits that Judge Cushman has definitely found that defendant's reamer does not contain the equivalents of the elements of claim 9 or of claim 19 and should have found non-infringement.

Defendant cannot be held to have appropriated the

novel features of the Wilson invention by simply using what it used prior to such Wilson invention. The *new things* of claims 9 and 19 *as set forth therein* are the changes to the "pronged" body and the "shouldered" cutters.

While Judge Cushman has, in view of the broad novelty of the original Double invention, held in Union Tool Co. v. Wilson & Willard Mfg. Co. that:

"the means adopted by Wilson for collapsing, expanding and holding the cutters in reaming position, are equivalents, substantially the same as those of Double." (237 Fed. 843.)

it does not necessarily follow that when judging the scope of Mr. Wilson's patent claims the modifications and changes in construction and the consequent additional functions produced by Mr. Wilson are to be disregarded and are not to be held of the very essence of his invention or of such modified elements and of the combination or that old devices or elements (not embodying such modifications or changes and not embodying such additional or changed functions or interrelations and not producing the new results thereby sought and obtained as stated in Mr. Wilson's patent), may be held the mechanical equivalents of such elements so modified and changed by Mr. Wilson.

While Judge Cushman in his opinion (in this case at bar) has referred to the fact that equivalency was so found in the suit on the Double patent it must also be borne in mind that his findings in such particular with respect to the changes forming the Wilson invention were that such changes were "to permit additional features and the accomplishment of further action." (237 Fed. 845.)

Defendant submits that to be a mechanical equivalent of the element of claim 9 or 19, i. e., the "pronged" body, the given device must "permit" and embody these "additional features" and permit the accomplishment of this further action. That this was the novelty of such changes. Clearly the "mechanical equivalent" must be such that the novel features accomplishing the further action are secured. Otherwise the substituted element does not perform substantially the same function in substantially the same manner.

Judge Cushman himself has determined what these "additional features" and "further action" are:

"The change permits the cutter shank to collapse between the prongs, which permits of more stock in the cutter shank, eliminating the notch on the inside, which is a feature of the Double cutter, above the inwardly projecting shoulder, which notch in the Double cutter is necessary to allow of the collapse of the cutter over the lower end of the extension, the web of which is unbroken. There is testimony that this notch constitutes a weakness in the Double cutter. (237 Fed. 845.)

"The provision for the collapse of the cutter between the prongs is the *chief additional function* accomplished by the pronged formation, etc." (*Idem*.)

Must not the alleged infringing device, i. e., the *reamer body*, to be an equivalent of the Wilson reamer body in the combination of claims 9 and 19, therefore, be such as to substantially in the same manner pro-

duce substantially the same result, in the combination of which it is a part? If so, then no reamer body can be the equivalent of Wilson's reamer body terminating in prongs forming a fork (of claims 9 and 19) unless such reamer body permits the cutter shank to collapse between the prongs, thus permitting more stock, in the cutter shank, than could be secured when the integral web at the end of the body and the notched cutter shank of Mr. Double's preferred embodiment of his invention is used.

Must not a "mechanical equivalent" be such a device (in such an interrelation with the other devices or elements of the combination) as will produce the *novel* features and advantages of the invention?

In applying this doctrine of equivalents to the 9th and 19th claim of the Wilson patent must not *also* Judge Cushman's differentiation of the "Jones Removable Bowl Reamer" be borne in mind, so that neither of these claims be given such an interpretation as to embrace such prior device? Judge Cushman differentiates Wilson from Jones:

"The shanks of the cutters (in Jones) bore at all times against the prongs and did not collapse between them."

And the Jones cutters did not respond to Mr. Wilson's "shouldered" cutters *because* the bearing faces extended clear across the body of the cutter. These bearing faces in Jones were not separated and spaced apart at the sides of the cutter shank so that when these bearing faces passed below the ends of the prongs the shanks of the cutters would swing in between the prongs. Yet all of defendant's reamer bodies embrace the integral web extending between the shanks of the cutters so that the shanks of the cutters bear at all times against the web and do not collapse between them, corresponding in this to the Double and the Iones prior reamers. Nor has defendant in any of its reamers provided a construction in which the elimination of the notch, referred to by Judge Cushman, is possible. Every one of defendant's cutters have had this notch and it was a necessity. Judge Cushman has said that the interrelation of the pronged body and the shouldered cutters is such that this notch is eliminated to permit of more stock in the cutter shank, by modifying the mode of action in collapse of the cutters, from swinging "over the lower end of the extension, the web of which is unbroken," to swinging between the prongs. This is the new feature of mode of operation of the Wilson invention. It is the improved mode of operation. Whether it is substantially the mode of operation of the Double invention, considered from the breadth of newness of the Double invention, is immaterial. In considering claims 9 and 19 we are necessarily confined, when testing mechanical equivalency, to the newness or novelty of the Wilson invention, for if we disregard the novelty or improved or additional function or mode of operation, we disregard the Wilson invention.

The meaning of claim 19 would seem definite and certain and not as requiring interpretation or interpolation for clearness.

"19. An underreamer comprising a body terminating in two prongs, and cutters each having two shoulders and a bearing face on the inner side of each of the two shoulders to engage said prongs."

The specific limitation of claim 9 to this modified mode of operation embodying this newness or novely of the Wilson invention is equally clear. Claim 9 specifically describes the cutters as "mounted between the prongs of said fork."

Claim 9 differs from claim 19, in that claim 9 does not, like claim 19, describe the cutter element of the claim in the exact words of claim 16. The limitation to the same modified mode of operation is, however, clear. Not only, as just pointed out, is claim 9 by its plain terms limited to the cutters being "mounted between the prongs of the fork," but also to "having shoulders inside the fork and faces to bear on the projecting lugs." The claim also specifically refers to the provision of "shoulders on the inner faces of the prongs, such shoulders providing cutter ways." This feature was not one of novelty, except in connection with the modification of the mode of action, i. e., the swinging of the cutter shanks in between the prongs. Judge Cushman distinctly so finds. He says that the Iones Removable Bowl reamer had this feature in connection with and on the prongs of the body of that reamer:

"These forks in the removable bowl reamer also form ways for the cutters." [Tr. Record p. 76.]

It is therefore clear that it was not these *ways* that were relied upon by Judge Cushman as the novelty of claim 9, but on the contrary this feature of the pronged body and "shouldered" cutter construction which rendered possible and embodied the principle of the shanks of the cutters swinging in between the prongs. It is clear that it was on this differentiation that patentable novelty existed in claim 9.

This analysis of Judge Cushman's decision justifies defendant's assertion that infringement of claims 9 and 19 was not based upon the combinations claimed in such claims, but on something extraneous to such claims. Infringement was found in a feature not patented by Mr. Wilson. The decree rests solely upon an alleged improvement which Mr. Wilson neither described nor claimed. An alleged improvement to which he ascribed no new advantage and which was so immaterial that he did not consider it is of sufficient importance to mention in his specification. It is a feature which evidently was not considered novel or covered by the Wilson patent by either Mr. Wilson or his counsel, for they voluntarily disclaimed infringement of all claims except claims 16 and 17. This formal affirmative action after full knowledge of the alleged infringement for eight years and after they had been for years involved in litigation over this very subject matter, is entitled to great weight. This change of position by complainant and his counsel, after pleading the election in the amended bill in B-62, shows that the contention that the feature upon which Judge Cushman has based his finding of infringement, was a mere afterthought with complainant.

THE ALLEGED INFRINGEMENT UPON WHICH THE DECREE IS BASED.

This is set forth in the opinion of Judge Cushman on pages 76-79 of the record, commencing with the next to last paragraph of page 76, and a slight further reference is made in the memorandum filed on the rehearing, last paragraph, page 84.

Defendant asserts that Judge Cushman is in error in his findings in this regard:

Ist. That the feature of construction referred to by him is not embraced in the claims held to be infringed; that such claims, 9 and 19, are not addressed thereto and cannot be interpreted to cover the feature referred to by him, except by entire reconstruction and redrafting, and the elimination from each of such claims of the features of construction and mode of operation clearly made the essential principles of the respective combinations.

2nd. That if claim 9 or 19 be construed to cover such feature, by eliminating from such claim the "pronged" body and the interrelated "shouldered" cutters, the feature relied upon by Judge Cushman was not novel but had been patented in the Double patent No. 2 and had been in public use and on sale in the "Jones Removable Bowl reamers" more than two years prior to the application by Mr. Wilson for the patent in suit.

3rd. That the feature so referred to by Judge Cushman has never in fact been utilized by defendant. It has never been embodied in any of defendant's reamers. That as so reconstructed claims 9 and 19 are not infringed.

The feature which Judge Cushman decides is an infringement is an alleged widening out of the inthrust bearings on the body, against which inthrust bearings the cutters bear when in reaming position.

In actual operation the "spreading-bearings" 9 of the Wilson patent are the parts which resist the forcible pushing inward of the respective cutters when in service in underreaming. The tendency of the blow to force the cutter bodily in toward the center of the well-hole is resisted by these surfaces and this portion of the impact of the blow is taken on these "spreading bearings 9." It is to be noted that instead of such bearings being *wider* than the bearings in the socalled "old style Double reamers," it is really a matter of transference of the location of such bearings. *The cross-sectional area of such bearings is not greater. On the contrary it is less.*

The transference of the location of such bearings to the extreme periphery of the body is incident to the pronged or forked construction. It was absolutely necessary to so transfer such "spreading bearings 9" to permit the cutting away of the central portion of the web to form an open mouthed or pronged reamer body.

Attention is first called, therefore, to the specification of the Wilson patent. It is to be noted that nowhere are these bearings 9 referred to as "inthrust" bearings. The only reference to them is as "spreading bearings." In the Wilson patent, and in the Wilson reamer, these bearings are slightly inclined, i. e., instead of extending parallel with the longitudinal axis of the body, each spreading bearing 9 is so formed that it extends slightly outward, away from the longitudinal axis of the body, as it progresses upward to the shoulders 10. [See Fig. I, Record p. 977.] The Wilson specification, lines 90-91, record, page 979, says: "9 designates the spreading bearings for holding the cutters 4 apart." The paragraph inserted by amendment, at line 63, record, page 980, it will be remembered was for the purpose of securing the allowance of the claims after their rejection on the patents to Double. In this paragraph the function of these "spreading bearings 9" which is emphasized is the inclination thereof and the part such inclination plays in the movement of the cutters to expanded or underreaming position and to the separation by the "pronged" or "fork" construction of these into separated and distinct bearings so as to engage only the outer edges of the cutters "leaving an open space between the middle portions of the cutters for a greater distance than would be the case were the cutters held apart by any intermediate portion between the lugs."

Not a word is found in the Wilson specification about producing any "wider" or "greater" inthrust bearings. Nor as a matter of fact is any wider or greater bearing secured. Judge Cushman seems to predicate his finding of infringement upon a "greater bearing." Record p. 78, fourth line from bottom of page.] The concluding sentence of his opinion also illustrates Judge Cushman's misinterpretation:

"The fact that defendant did not appropriate the, perhaps, relatively more important conception of Wilson, whereby the cutter shanks were allowed to collapse between the prongs, does not excuse it, or take from the infringement it has practiced, for the seat or bearing of the cutter-head on these faces, or lugs, is not dependent upon the swing in collapse of the cutter shanks between the prongs." [Record p. 79.]

Instead of claiming the invention thus carved out for Mr. Wilson by Judge Cushman, Mr. Wilson in his patent specification, in his representations to the patent office in securing the allowance of the claims, has represented that what he desired to cover was not greater or wider inthrust bearings, or cutters having wider bodies, but arranging "said bearings (are) at the sides of the lower ends of the body, thus engaging the outer edges of the cutters to hold the cutters apart and leaving an open space between the middle portions of the cutters for a greater distance upward than would be the case were the cutters held apart by any intermediate portion between the lugs." (Specn. ll. 75-90, p. 980.) The inclusion in claims 9 and 19 of the limitation of the body to a body "terminating in prongs forming a fork" and "terminating in two prongs," respectively, thus brings out this special feature to a nicety, i. e., the separation of these spreading bearings 9 and their engagement with the outer edges only of the cutters, for the purpose just quoted from the Wilson specification. But Judge Cushman's interpretation eliminates this descriptive statement of the function of these separated bearings and ignores what Mr. Wilson has solemnly stated was the object and purpose of the "pronged" formation, thus separating these bearings. Judge Cushman's interpretation ignores the fact that defendant does not secure in any of its reamers the objects, advantages or results which Mr. Wilson has stated were sought and attained by him by thus separating and locating these bearings. It gives to claims 9 and 19 a meaning which makes such claims apply to a construction which will not secure *any* of the objects which Mr. Wilson states in his patent are the objects of his invention. It ignores Mr. Wilson's statement that he so constructs the mouth of the underreamer as to dispense with stock between the collapsed cutters, *thus enabling the cutters to close together*. (Specn. Il. 33-35, p. 979.)

This is not a mere verbal advantage. It is one which Mr. Wilson has emphasized, for he says in the specification, "This feature makes extreme expansion possible and makes the use of maximum amount of stock in shanks of cutters possible, thus insuring maximum strength of cutters." None of these advantages are inherent in any of defendant's reamers by reason of the widened bearings referred to by Judge Cushman. Yet all and each of these in here in the pronged construction and the use of cutters having their tilting shoulders 16 and bearing faces 4³ arranged as separated bearings at the outer edges of the cutters, as definitely set forth in both claim 9 and claim 19, and as set forth in the argument advanced to the patent office before the allowance of the claims. [Record pp. 1047 and 1053.] In these arguments Mr. Wilson criticises the patent office examiner saying: "The Double patent (748,054) does not cover on the reamer terminating in prongs forming a fork. He apparently quite overlooks the difference in the construction of the two reamers." After having his original claims 16 and 17 [Record p. 1040] rejected on the Double patents, Mr. Wilson redrafted such claims, and in the redrafted claims emphasized this feature of the separation of the bearing surfaces 4³ and their location at the outer edges of the cutter, as follows:

"The Double cutter has its bearing face entirely across the cutter instead of on the inner side of the shoulders at the sides of the shank."

The words of description of this separation of these bearing faces and of these shoulders as adopted for the new claims 16 and 17 was the same as that used in the additional claims 19 and 20 inserted in connection with this last quoted argument. [Record p. 1053.]

How can a claim thus specifically calling for the combination of the forked body terminating in prongs and for the "shouldered" cutters be construed to be a claim merely upon any formation of reamer body and any form of cutters, in which the joint relation of these parts does not employ a single one of the advantages claimed for the elements of the combination or for the combination, as defined by the inventor? Can such a claim be revamped by the court so as to be a claim for "the seat or bearing" formed by "entirely shearing away the side web of the extension" [Record p. 79] regardless of whether such construction is the mechanical equivalent of the several elements of the claim, and regardless of whether such construction secures a single one of the advantages or results sought or obtained by the inventor, which he has stated in his patent are the objects to be attained by his invention?

Such action would not be applying the doctrine of equivalency. It would on the contrary be reading out of the claim the very essence of the combination as claimed by Mr. Wilson and be addressing the claim to another subject matter. The words of the Supreme Court in White v. Dunbar (119 U. S. 47) apply:

"It is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms."

All the decisions inhibit the court from twisting the claim about "so as to make it include something more than, or something different from, what its words express." (*White v. Dunbar, supra.*)

See also:

Brown v. Stilwell & Bierce Co., 57 Fed. 731, 739; Harris v. Alle, 15 Fed. 106; Klein v. Russell, 19 Wall. 433; Smith v. Putnam, 45 Fed. 202.

As said by the Circuit Court of Appeals in Buffington's Iron Building Co. v. Eustis, 65 Fed. 804:

"The purpose of a claim in a patent is to notify the public of the extent of the monopoly secured to the inventor, and while it is notice of his exclusive privileges, it is no less an estoppel of the patentee to claim under the patent any combination or improvement he has not therein distinctly claimed as his invention."

As said by Judge Bean in Denny Renton Clay & Coal Co. v. Portland Cement Pipe Co., 232 Fed. 890, at page 894: "Having come to this conclusion, what is the legal effect of such finding? It is the province of a patentee to make his own claim, and his privilege to restrict it, and, as said by Mr. Justice Blatchford in Fay v. Cordesman, 109 U. S. 408, 421, 3 Sup. Ct. 236, 244 (27 L. Ed. 979):

'If it be a claim to a combination, and be restricted to specified elements, all must be regarded as material, leaving open only the question whether an omitted part is supplied by an equivalent device or instrumentality.'

"Stated another way:

'In patents for a combination, if the patentee specifies any element as entering into the combination, either directly by the language of the claim or by such a reference to the descriptive part of the specification as carries such element into the claim, he makes such element material to the combination, and the court cannot declare it to be immaterial.' Electric Protection Co. v. American Bank Protection Co., 184 Fed. 916, 922, 107 C. C. A. 238, 244.

"The latter authority announces also this principle:

'When the patent is for described means or mechanism to accomplish a specified improvement, it will be limited to the particular means described in the specification, or their clear mechanical equivalents.'

"Still another principle seems to be well established in patent law:

'That, as the inventor is required to enumerate the elements of his claim, no one is an infringer of a combination claim unless he uses all the elements thereof.' Cimiotti Unhairing Co. v. Am. Fur. Ref. Co., 198 U. S. 399, 410, 25 Sup. Ct. 697, 702 (49 L. Ed. 1100).

"See also Boyd v. Janesville Hay Tool Co., 158 U. S. 260, 267, 15 Sup. Ct. 837, 39 L. Ed. 973.

"It follows, therefore, if any essential element of the combination is omitted from the alleged infringing device, without substituting therefor its clear mechanical equivalent, the charge of infringement is not sustained. Acme Truck & Tool Co. v. Meredith, 183 Fed. 124, 127, 105 C. C. A. 414; Union Match Co. v. Diamond Match Co., 162 Fed. 148, 155, 156, 89 C. C. A. 172; Brown v. Stilwell & Bierce Manuf'g Co., 57 Fed. 731, 6 C. C. A. 528."

Judge Cushman directly finds that defendant's reamers omit not simply *one* of the elements specified in claims 9 and 19, but *both* elements as specified therein. He admits that defendant's reamer neither have (1) the body terminating in prongs *nor* (2) the "shouldered" cutters.

"The omission of an essential element in a specific claim, without substitution of an equivalent, avoids infringement."

Blake v. San Francisco, 113 U. S. 679; Voss v. Fisher, 113 U. S. 213; Yale Co. v. Sargent, 117 U. S. 373; Kinzel v. Luttrell, 67 Fed. 926.

This court, in Hardison v. Brinkman, 156 Fed. 962, held that the claims of the Hardison patents were not infringed for the reason that by the words of the claims each was "explicitly limited to the use of a friction device which at all times bears upon the interior of the well casing," etc., and says: "A mechanical equivalent which may be substituted for an omitted mechanical element in a combination claim is one that performs *the same function* by applying the same force to the same object through the same means and mode of application."

Applying this rule to claims 9 and 19, the court must find some device in the defendant's reamers which has the same function as the forked or pronged construction in its combination with the "shouldered" cutters, and some device which has the same function as the "shouldered" cutters, with their bearing faces arranged at the outer edge of the cutter and on the inner side of each of the shoulders of the cutter. Inasmuch as the court below has correctly found the mechanical fact to be that such function of the forked or pronged construction does not exist in any of defendant's reamers it follows that defendant's reamers have no mechanical equivalent of this claimed element. Inasmuch also as the court below has correctly found that the cutter of defendant's reamer does not have the separated shoulders and bearing faces at the outer sides of the cutter shank or the function of such separated shoulders 16 and bearings 43, it follows that defendant's reamers cannot possess the mechanical equivalent of such element of claims 9 and 19.

"Anything which does not possess this function and this action, no matter to what extent in other particulars it may answer its cause, does not infringe."

Eppler v. Campbell, 86 Fed. 141.

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See also:

H. F. Brammer Co. v. Witte Co., 159 Fed. 726, 728;

Brooks v. Fiske, 15 How. 212; Stimson v. Railroad Co., 10 How. 329; Adam v. Folger, 120 Fed. 260.

As said by Judge Morrow in American Can Co. v. Hickmott Asparagus Canning Co., 137 Fed. 86, 87-88:

"In a patented combination, a device in one mechanism, to be the equivalent of a device in another, must perform the same function (Rowell v. Lindsay, 113 U. S. 97, 103) and perform that function in substantially the same manner as the thing to which it is alleged to be an equivalent. Walker on Patents, section 354."

Judge Cushman says:

"The forked formation of complainant's reamer body was essential to the complete collapse of the cutters; but it was not essential to the co-action in the particular in which infringement is found. The fact that, in describing, in the claims, a member of a machine which performs two functions in such a way as to disclose a feature of its fitness to perform one function, which feature is not essential to the discharge of its other function, does not warrant competitors in dropping such feature and thereby appropriate one-half of the invention and its advantage, nor prevent the court from according the patentee such a range of equivalents as will fairly protect him in the substantial merits of his invention. If so, form becomes everything and substance nothing." [Record p. 84.]

In this statement Judge Cushman directly admits all of defendant's argument that the wording of claims 9 and 19 directly and positively sets forth and describes the function of the interrelation and conjoint action of the forked or pronged body and of the shouldered cutters to secure the very advantages (hereinbefore pointed out) claimed for such combination in the specification of the Wilson patent. Yet he says the court may ignore such limitations and read out of the claim the limitations to such constructions and conjoint action of the elements as are specifically described in the claim and are required to perform the specific function asserted for them by the patentee, and revise the claim to cover an association of elements which totally omits such constructions of the elements and their conjoint action, with the resultant new function, and may twist the claim (like a nose of wax) so as to cover only some other advantage not requiring either the construction or the particular conjoint action or interrelation of the elements as specified in the claim, and this for the avowed purpose of reconstructing such claim so as to cover something different which His Honor thinks the patentee might have claimed but did not.

Defendant submits that it is a fair and truthful summary of Judge Cushman's opinion to say that His Honor freely and frankly admits that both claims 9 and 19 specifically call for the "pronged" construction of body and for the "shouldered" cutters and for the conjoint action of these to secure greater strength in the cutter shanks, to secure the complete collapse of the cutters, to secure greater expansion of the cutters, to leave a maximum open space between the cutter, to receive the loose material or sludge during the drilling operation —to secure all the objects and advan-

ing operation,—to secure all the objects and advantages set forth and described by Mr. Wilson in his patent, and that he admits that defendant has "dropped such feature" entirely and has never used such combination in any of its reamers.

Defendant submits that it is a fair and truthful analysis of Judge Cushman's opinion to say that he has utterly ignored the plain context and import of each of claims 9 and 19 and has twisted each of them to call for *only* that feature which he has deduced to be an important feature of the Wilson reamer, *but a feature to which neither claim 9 nor claim 19 was addressed*. That as thus *revised* by Judge Cushman the 9th and 19th claims have an entirely different meaning and legal effect from that which their plain, concise and unambiguous terms assert and "distinctly point out" as required by section 4888 of the Revised Statutes. This is not interpretation. It is total revision. Total reconstruction. It is not judging the meaning of the contract by its clear terms.

Defendant submits that Judge Cushman falls into error in stating that otherwise "form becomes everything and substance nothing." He is evidently referring to changes in the form of the elements, and particularly to Mr. Wilson's change from the integral web across the bottom of the reamer to the pronged formation. But that was Wilson's conception and upon that and the conjoint action of his "shouldered" cutters Mr. Wilson founded his invention. It was Mr. Wilson's change from the Double inventions. It was all that was novel over the Jones reamer.

As said by the Circuit Court of Appeals for the Eighth Circuit in O. H. Jewell Filter Co. v. Jackson, 140 Fed. 340, 346:

"But the rule that changes of form do not avoid infringement has at least two exceptions—when the form of the mechanical element is the distinguishing feature or characteristic of the invention, and when the change in the form of the element changes the principle or mode of operation of the combination."

Here form was the distinguishing feature characteristic of the invention and Mr. Wilson made certain detail changes in the mode of operation by changing the form of the reamer body to a "forked" or "pronged" construction, and by changing the form of the cutters to the "shouldered" cutters, each with the tilting shoulders 16 and bearing faces 4³ arranged at the outer edges of the cutter, separated from each other for the very purposes described by Mr. Wilson in his patent. This is the expressed novelty of the claims 9 and 19. These produce the advantages described by Mr. Wilson. When defendant retains the old form of body and the eld form of cutters, and does not secure this changed mode of operation thus produced by Mr. Wilson-then upon the issue of infringement "form" becomes of the essence of the inquiry.

Mr. Wilson changed the form of the body to the "forked" or "pronged" construction and changed the form of the cutters by transferring the tilting shoulders 16 and bearing surfaces 4³ to the outer side of the cutters in order to secure the change in mode of operation and secure the new results sought by him. By these changes in form he alleges in his specification that he secures certain advantages. These changes marked his departure from the old reamer bodies and the old cutters. As said by Mr. Walker in his work on Patents, section 363, page 316 (4th Ed.):

"A change of form does not avoid an infringement of a patent, unless the form shown in the patent is necessary to the functions which the patent ascribes to the invention (Long v. Pope Mfg. Co., 75 F. R. 839), or unless that form is the distinguishing characteristic of the invention (National Hollow Brake-Beam Co. v. Interchangeable Brake-Beam Co., 106 F. R. 711; Ide v. Trorlicht, Duncker & Renard Carpet Co., 115 F. R. 149; Dowagiac Mfg. Co. v. Superior Drill Co., 115 F. R. 904), or is essential to its patentability (Adam v. Folger, 120 F. R. 263), or unless the patentee specifies a particular form as the means by which the effect of the invention is produced (O'Reilly v. Morse, 15 Howard 123; Ewart Mfg. Co. v. Iron Co., 31 F. R. 150; Pacific Cable Ry. Co. v. Butte City Ry. Co., 55 F. R. 763), or otherwise confines himself to a particular form of what he describes (Pope Mfg. Co. v. Mfg. Co., 34 F. R. 890; Union Steam Pump Co. v. Battle Creek Steam Pump Co., 104 F. R. 342)."

Defendant submits that the subject matter of claims 9 and 19 of the Wilson invention falls within each and every one of these exceptions:

1. The form called for by these claims is necessary

to the functions which the patent ascribes to the invention. Judge Cushman has so found.

2. The form of reamer body and the form of the cutters as called for or described in these claims is *the distinguishing characteristic* of the Wilson invention differentiating the combination of these claims from the Double patent No. 2 and from the Jones Removable Bowl Reamer.

3. The limitations to the forms expressed in these claims are essential to their patentability. To their novelty over the Double patent No. 2 or over the Jones Removable Bowl Reamer.

4. These claims specify these particular forms of body and of cutters as the means by which the new results described in the patent are to be secured. The patent is to be construed as a whole. It is one contract. These claims are to be construed in the light of the claimed advantages and of the objects which Mr. Wilson *states in his patent* he has sought and accomplished.

Yet neither of these forms as specified in these claims are *essential* to the second function referred to by Judge Cushman. There is no pretense even that defendant has utilized either of these forms in any of its reamers.

"It is well settled that, in order to constitute the infringement of a combination, it must appear that the alleged infringing device included every element of the combination as claimed. It is immaterial that the elements claimed in the patent of

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plaintiff and omitted in the defendant's device are not of the essence of the real invention."

Kinzel v Luttrell, 67 Fed. 926.

See also:

Electric Co. v. Hall, 114 U. S. 87; Gage v. Herring, 107 U. S. 640; Water Co. v. Desper, 101 U. S. 332; Dunbar v. Meyers, 94 U. S. 187; Reedy v. Scott, 23 Wall. 352.

"But the appellant is met here by the unquestioned rule that the absence from a device or construction, that is alleged to infringe, of a single essential element of a patentable combination of old elements, is fatal to the claim of infringement."

Murphy v. Excelsior, 76 Fed. 965.

Judge Cushman has directly recognized the fact that the terms of claims 9 and 19 are specific to the forked or pronged formation and to the shouldered cutter formation so as to disclose the peculiar and specific formation of the conjoint action of these two forms, for he says:

"The fact that, in describing, in the claims, a member of a machine which performs two functions in such a way as to disclose a feature of its fitness to perform one function." [Record p. 84.]

He does not assert that the second function to which he refers has been in any manner particularly or even directly referred to or included in either claim 9 or 19. This fact, taken in consideration with the fact that the second function to which he refers is not set forth or described in any manner in the Wilson specification, shows to what an extreme extent Judge Cushman has gone in his reconstruction of these two claims, and how totally he has ignored their plain import and meaning and eliminated from them their concise specification of the function and conjoint action which does accomplish the very objects which Mr. Wilson states in his patent were what he sought to and did accomplish.

Judge Cushman has definitely found that so far as claims 9 and 19 are concerned there is nothing included in these claims which has been embodied in any of defendant's reamers except—

"entirely shearing away the side web of the extension to form a lug, the bearing faces to accommodate the wider cutter-head" [Record p. 79], which is the *second* function referred to by him in his memorandum on rehearing. [Record p. 84.]

Judge Cushman has also found that eliminating from consideration this distinguishing function (of permitting the collapse of the cutters between the prongs to thereby secure the several advantages and allegedly new result heretofore referred to), secured by Mr. Wilson by the "pronged" form of body and the "shouldered" cutter formation, there is nothing new or novel in claims 9 or 19 *unless by his reconstruction and revision* of such claims, such claims are held to cover this feature of the widened inthrust bearing. This is the true meaning, doubtless, of the following paragraph of Judge Cushman's opinion appearing on record page 76:

"Passing to claims 9 and 19, it has already been found that, as ways for the cutters to slide, or ride on, the faces of the prongs and lugs were no more than equivalents of the ways found in the Double invention; but, insofar as these prongs or lug-faces afforded bearings for the cutter when in reaming position is concerned, a different question is presented, and this is the feature covered by claims 9 and 19."

It follows as a matter of law that if "the faces of the prongs and lugs *were no more than equivalents* of the ways found in the Double invention," then no patentable novelty or patentable invention existed in claims 9 and 19, for to merely substitute equivalents is not invention. On the contrary it is mere mechanical skill.

It follows also that what would infringe if later, anticipates if prior.

So we find from every analysis of Judge Cushman's opinion and decision that the only finding of infringement rests wholly and solely upon the alleged wider inthrust bearings to which Judge Cushman averts.

This is set forth in the following paragraph [Record p. 77]:

"In the patent in suit, the lower portion of the outer web is cut away, giving the cutter less lateral and greater inthrust bearings. *The lugs on either side are thereby created*. The outer face of these lugs form bearings for the inner shoulder on the cutters. This formation enables the maker —because of the removal of the side web—to give the cutters a wider inner face and inner bearings at the outer side of the inner face of the cutter."

The "lugs," referred to by Judge Cushman as present in the Wilson reamer, are the lower end portions of the forks formed by the prongs. These different words of description thus applied to different portions of the same pronged formation require careful scrutiny not to be misunderstood. The Wilson specification says that the body I terminates in prongs 2, forming a fork.

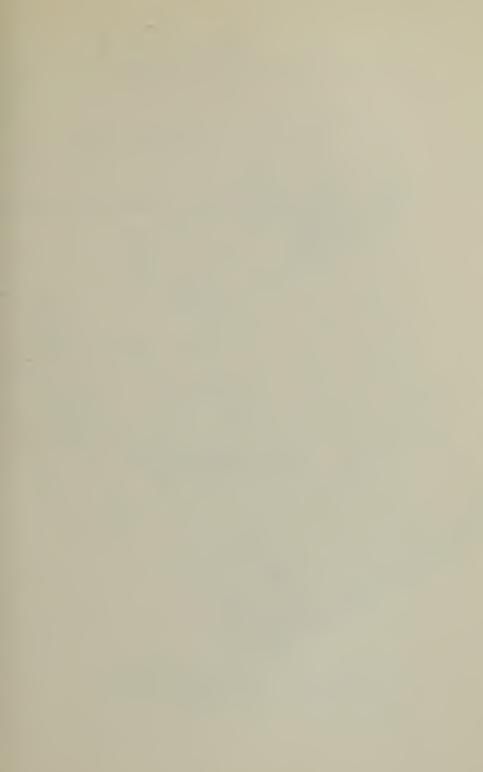
"Said prongs are provided with and terminate in downwardly projecting lugs 2' to spread the cutters apart." [Record p. 979, lines 64-70.]

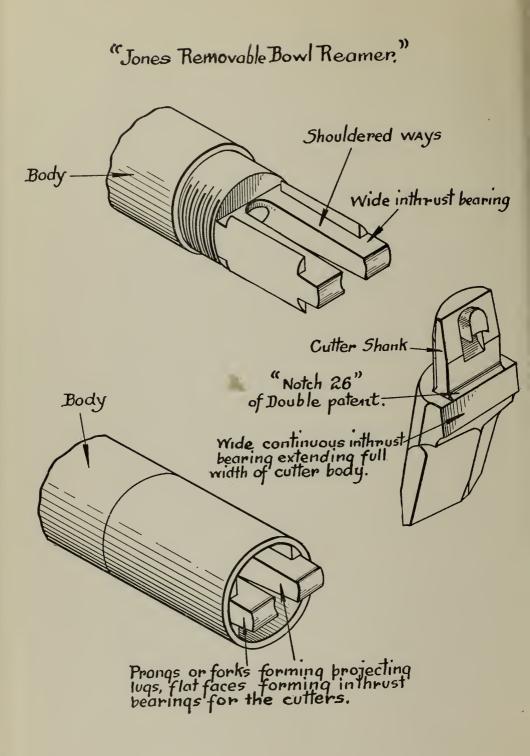
With the exception of reference to "the spreading bearings 9 on the lugs 2" the specification makes no other description of these lugs. What portions of the end of the prongs or of the forks formed by the prongs are to be denominated or termed or considered "lugs" is not clear from the specification. The specification, however, does say that the "spreading bearings 9 are on the lugs 2" and does say that these spreading bearings constitute wedges for wedging the cutters apart. [Record p. 980, lines 73 to 75.] On the same page of the Wilson specification, line 46, it is stated:

"The spreading bearings 9 of the lugs 2' engage the expansion bearing faces 4^3 of the cutters."

With this description and with the drawings of the Wilson patent before us, the most definiteness that we can attach to the term "lugs" is that they are the lower end portions of the forks or prongs. Inasmuch as there is a tine of a fork at each side (in other words two separated prongs), the lugs must be considered the lower portions of these tines or prongs.

Judge Cushman in finding infringement has definitely





stated that this pronged formation and its interrelation to the shouldered cutters must be disregarded. He finds that none of defendant's reamers embody such construction or interrelation (which necessarily includes the collapsing of the shanks of the cutters in between the ends of the lugs or prongs, as illustrated in Fig. 1 of the drawings of the Wilson patent). Disregarding this collapsing of the shanks of the cutters in between the lugs or prongs, that is to say, their occupying the space between the separated lugs or prongs, we find absolute correspondence then between the lugs or prongs of the "Jones Removable Bowl Reamer Body" and this structure so considered. In the Jones Removable Bowl Reamer the forks or prongs are shouldered and also form ways for the cutters having the same functions as the ways 3 of the Wilson patent. Not only is this true mechanically, but this is one of the findings of fact by Judge Cushman. [See Record p. 77.]

Opposite this page is inserted a drawing truly showing the formation of the body of this "Jones Removable Bowl Reamer" and showing the formation of the bearing face of the Jones cutter. Unquestionably the bearing face of this cutter is wider than the bearing face of any of the cutters of defendant's reamers and undoubtedly the inthrust bearings on the prongs of this Jones reamer body are wider than any of the inthrust bearings of either or any of defendant's reamers or *of the Wilson reamer*. It is conclusively shown, therefore, that prior to the date of Mr. Wilson's alleged invention and more than two years prior to the date of filing of his application for the patent in suit, the very feature (so far as it applies to any of defendant's reamers) found to be an infringement of claims 9 and 19 by Judge Cushman was well known. That Mr. Wilson was not the original, first or sole inventor thereof, and that the same was totally lacking in novelty when Mr. Wilson made his first reamer.

The extreme end surfaces of the prongs or lugs of the forked body of this Jones reamer are the surfaces which cause the expansion of the bits by contact of the shoulders just above the bearing surfaces of the bits with these end surfaces. The shoulders last referred to are the equivalent of the notch 26 (Fig. XI) of the first Double pat nt, "Defendant's Exhibit Double Patent No. 1," and this is the notch referred to by Judge Cushman on page 77 of the record as weakening to some extent the cutter, and the notch to which he has referred in his opinion in 237 Fed., page 845, when he said that Wilson's change of form to pronged or forked formation of reamer body

"permits the cutter shank to collapse between the prongs, which permits of more stock in the cutter shank, eliminating the notch on the inside, which is a feature of the Double cutter, above the inwardly projecting shoulder, which notch in the Double cutter is necessary to allow of the collapse of the cutter over the lower end of the extension, the web of which is unbroken. There is testimony to the effect that this notch constitutes a weakness in the Double cutter." (It must be borne in mind at all times that all of defendant's cutters have embodied this notch. This is true of all of the reamers, "Double Improved," Type "D" and "E" and "F.")

The outer faces of these prongs or lugs of the Jones body are each of much greater width and of greater area than the outer faces of the lugs of the Wilson reamer. The construction of the Jones reamer body certainly gives the cutters "a wider inner face and inner bearings at the outer side of the inner face of the cutter" (Judge Cushman's opinion, p. 77) than does the Wilson construction.

However, it is to be noted of this Jones reamer that the bearing face of the cutters is one continuous bearing face across the full width of the cutter, corresponding exactly in this respect to the bearing faces of the cutters of all of defendant's reamers. The Jones cutters do not have "two shoulders and a bearing face on the inner side of each of the two shoulders" (claims 16 and 19). Consequently it cannot be said that the Jones cutters have the separated tilting shoulders 16 and a bearing face 4^3 on the inner side of each of the shoulders which are arranged at the outer edges of the cutter only, as in the Wilson patent and reamer. Therefore, Judge Cushman's description [Record p. 77] of the combination between the bearings on the lugs or forks and the "inner bearings at the outer side of the inner face of the cutter" as applied to the Wilson construction does not apply to this Jones cutter, nor does it apply to any of defendant's cutters.

Judge Cushman attempts to differentiate the bearing at the end of the prongs of the "Jones Removable Bowl Reamer" from the "spreading bearings 9" formed on the lugs 2' of the Wilson reamer. He says:

"The bearing at the end of the prongs afforded the inner face of the cutter-head in the removable bowl reamer does not anticipate the bearing afforded by the 'lug' face of the patent in suit, for, in the removable bowl reamer, *the bearing afforded is considerably less across than the diameter of the extension of the reamer body, or bowl.*" [Record p. 76.]

It will be noted that the prongs of the said Jones reamer do not extend quite to the periphery of the body. They lack the quarter inch on each side which corresponds to the removable ring or sleeve. However, they do extend clear to the extreme edges of the body at the bottom and the bearing faces of the Jones cutters extend clear to the extreme edges of the bearing faces on the prongs so that as a matter of actual fact the bearing faces of the Jones reamer will actually measure broader than the bearing faces 9 of a Wilson reamer. Measurements of the actual exhibit "Fred W. Jones Reamer No. 1" (the Jones Removable Bowl Reamer) and measurement of the same sized Wilson reamer proves this absolutely. We shall see that in this respect in which Judge Cushman criticises this Jones reamer and apparently thereby determines it not to afford the wider or widened inthrust bearing referred to by him, defendant's reamers correspond absolutely with the Jones Removable Bowl Reamer, and that the inthrust bearing or face of any one of de-

fendant's cutters does not bear on the inthrust bearing of defendant's reamers to near as close a point to the edge as does this Jones reamer. It is therefore seen that if the Jones reamer is differentiated from the Wilson reamer on the ground that the bearing afforded is considerably less than the diameter of the extension of the body, or bowl, then the same distinction is true of each one and every one of defendant's reamers. Again, the rule applies that that which would not anticipate if earlier will not infringe if later. Again we see demonstrated beyond peradventure of doubt that the differentiating feature pointed out by Judge Cushman between the bearing referred to in the Jones reamer and the bearing referred to by him in the Wilson reamer is absent from each and all of the defendant's reamers and absent in the same sense and degree that it is in the Jones reamer.

Judge Cushman in discussing these bearings on the lugs and their relation to his charge of infringement, says:

"The bearings on the 'lugs' thus afforded being in the direction of the extension of the enclosing web—necessarily make a stronger formation than the bearing confined, as in the original Double design, to the slotted intersecting cross web. The broader cutter-head and broader bearing furnished by the device of the patent in suit, obviously tend to lessen any tendency of the cutters to twist in operating and there is testimony in the cause, which I am inclined to credit, that, with the narrower Double cutter, the work of the reamer is more likely to result, under certain recurring conditions, in what is termed 'key-holing,' that is, in the cutters which are hung opposite to each other, each getting started to cut downward in the same place and not reaming uniformly around the hole."

If the bearings on the "lugs" referred to by Judge Cushman "necessarily make a stronger formation" than in the device as illustrated in the first Double patent, still we have the same stronger formation in the pronged construction of the Jones reamer. In the Jones reamer we have even a broader cutter-head and broader bearing than in the Wilson. So it is apparent that Judge Cushman did not bear in mind the true legal effect of the Jones reamer as limiting the possible novelty in the Wilson invention.

If the broader cutter-head and broader bearing thus referred to by Judge Cushman as existing in the Wilson forked or pronged construction "tend to lessen any tendency of the cutter to twist in operating" then the broader cutter-head and the broader bearing of the Jones reamer accomplishes the same identical result and function. So that each of the observations of Judge Cushman last quoted apply with equal force to the Jones Removable Bowl Reamer and do not distinguish the Wilson invention therefrom.

Clearly defendant had an absolute right to use the Jones invention. It had an absolute right to modify its reamers to embody these features of the Jones reamer. While Mr. Fred W. Jones applied for a patent on this removable bowl reamer on December 23rd, 1901, the same became public property on December 18th, 1904, by the abandonment by Mr. Jones of his

application by failure to prosecute the same in the patent office as required by law. [Record pp. 1077-1097.] Mr. Jones' original application having become abandoned, he could not after 1904 have made a new application as the two years' prior use provision of the statute had barred another application. It was therefore public property and upon its becoming public property the Double reamers were modified as shown by the "Double Improved" and Types "D" and "E." It was from the Jones Removable Bowl Reamer and not from the Wilson that the information for the changes was derived. It was not Mr. Wilson's invention but the abandoned invention of Mr. Jones, which Mr. Jones dedicated to the public that was utilized by the defendant (if the court can find that defendant did in fact use either). In reality defendant has used the improvement of the Double patent number 2, number 748,054, and the bearings referred to by Judge Cushman are as wide therein as in the "Double Improved," or Type "D" or Type "E" or Type "F" reamers.

The shouldered ways of the Jones Removable Bowl Reamer will prevent twisting of the cutters in the same manner as the shouldered ways 3 of the Wilson patent. The broad inthrust bearing on the Jones cutter contacting on the even broader inthrust bearings on the Jones prongs or forks prevent any tendency of the cutter to rock to an even greater degree than do the forked or pronged construction of body and the separated shoulders 16 and bearing faces 4³ of the Wilson patent.

It is thus seen that the Jones Removable Bowl Reamer is a complete and full anticipation of the feature referred to by Judge Cushman and upon which he has based his finding of infringement.

It needs no argument to demonstrate that the claims of the subsequent Wilson patent are not entitled to such a construction as will embrace within them the features of the Jones Removable Bowl Reamer.

It is believed that Judge Cushman would not have fallen into this error of finding novelty in the broadened bearings referred to by him, if he had not overlooked the full significance of the prior Jones reamer.

Bearing in mind that Judge Cushman concludes his opinion by stating that "the seat or bearing of the cutter-head on these faces, or lugs, is not dependent upon the swing in collapse of the cutter-shanks between the prongs" [Record p. 79], the full and complete anticipation by the Jone, reamer is self-evident.

What reason Judge Cushman had for referring [Record p. 75] to the fact that "only a very few machines of this design ('Jones Removable Bowl Reamer') were ever made" is not apparent, unless he discounted the legal effect of such Jones reamer as an anticipation for such reason. There were 10 or 12 of them made. [Record p. 785.] Some were sold in 1902 and 1903; others were rented.

The record shows that this Jones reamer was suppressed by the owners of the Double patent No. 1 as an infringement thereof. [See testimony of Mrs. Olive E. Jones, Q. 20-21, p. 866; George L. Skinner, Q. 35, p. 887; XQ. 50-51, p. 890; XQ. 68, p. 895; RDQ. 82, p. 898.]

The public use at a date two years or more prior to the date of Mr. Wilson's application for patent (or any time prior to Mr. Wilson's making his alleged invention) of *one* successful Jones reamer renders it just as much a bar to Mr. Wilson's claim for a patent on any combination or construction utilized therein as though a million were used. So also a single sale has just as much legal effect as an anticipation as the sale of hundreds.

This is so well settled as to need no citation of authorities.

Whether Judge Cushman minimized the effect to be given to this Jones Removable Bowl Reamer as a part of the art prior to Mr. Wilson's invention upon some erroneous consideration reflected in this one observation: "Only a very few machines of this design ever made," is not absolutely clear. But it is absolutely certain that he did fail to give this Jones reamer the full effect legally due to it as limiting the possible novelty of Mr. Wilson's claimed invention.

In view of this Jones reamer the 9th and 19th claims must be narrowly construed. As reconstructed and revamped by Judge Cushman they clearly cover the Jones reamer and are rendered void as wholly anticipated thereby.

If on the other hand, claims 9 and 19 are construed, in accord with their plain terms, to include the pronged or forked construction of body in its specific interrelation to the "shouldered" cutters of the Wilson reamer, such cutters having their tilting shoulders 16 and inthrust bearings 4³ separated and arranged at the outer edges of the cutters with the uncut shank projecting inward of and between these shoulders 16 and bearings 4³, so that the cutters in collapse swing in between the prongs or forks, thus securing the novel results set forth in the Wilson patent specification, then this "Jones Removable Bowl Reamer" does not anticipate these claims. Nor does any of defendant's reamers infringe.

It is submitted that this is the true intent of these claims and the only construction which can be placed thereon without doing violence to their plain terms, and the only construction which can be placed upon them and still maintain their validity.

On pages 1004-1009 of the record appears the patent to O'Donnell & Willard, issued June 14, 1904. This patent was issued prior to the date Mr. Wilson claimed to have conceived the invention set forth in the patent in suit. An underreamer is in evidence as "O'Donnell & Willard Underreamer" which shows the same cutters as this O'Donnell & Willard reamer. Both Elihu C. Wilson, the complainant herein, and his brother and expert witness, William W. Wilson, have testified this was a successful, practical device. As this is the sworn testimony of the complainant, in this case he should be bound thereby. If he is, then such O'Donnell & Willard patent and reamer each clearly anticipate the feature upon which Judge Cushman predicates his finding of infringement. It is true that upon other testimony (which is not in this case) this defendant and its co-owners of the Double patents have asserted and contended that such O'Donnell & Willard patent is a mere paper conception which, when attempt was made to use a machine substantially like the patent, was proven practically inoperative and valueless-and which

was in fact abandoned as inoperative and valueless by Messrs. O'Donnell and Willard.

As said before Mr. Elihu C. Wilson's testimony was an effort to testify to this O'Donnell & Willard reamer being a fully successful tool. Can he complain if in this suit his testimony is taken at 100%? Is he not estopped in this case from asserting to the contrary? Is he not bound by his own testimony?

If so, the cutter-heads of the O'Donnell & Willard are wider than those of the Wilson. The "broader bearing," referred to by Judge Cushman in the last paragraph of page 77, is shown more completely in this O'Donnell & Willard patent than in the Wilson. Each statement of such paragraph applies better to O'Donnell & Willard than to Wilson. E. C. Wilson had full knowledge of this O'Donnell & Willard reamer prior to his invention.

Shall we believe the complainant Mr. Elihu C. Wilson, when testifying to save himself from the charge of infringement? *That's the question*. [See Record Q. 283-285, p. 207; also Record pp. 214-222.]

There remains one very important part of Judge Cushman's opinion to be considered. It shows most conclusively the very narrow limits of the infringement found by him.

Judge Cushman says:

"In the earlier Double devices there were secondary dovetails adjacent to the junction of the cutter-head and shanks, with corresponding ways in the inner faces of the extension, forming the recess in which the cutter is mounted on the body." [Record, last two lines p. 78, et seq.] These secondary dovetails are numbered "10" in Figs. V and VI [Record p. 983] of the drawings of the Double patent No. 2, which was the principal reference cited by the patent office against Mr. Wilson's application for the patent in suit. The "corresponding ways," referred to by Judge Cushman, are the "grooves 15," shown in Figs. III and IV. Reference to the mechanical exhibits shows these dovetails, for example, —in the Type "F" reamer and in the Type "D" reamer. The cuts reproduced from pages 28 and 29 of defendant's catalog [Record pp. 1099 and 1100] show the parts of these reamers separately. The presence of these "secondary dovetails" is clearly shown in both reamers, also the presence of these "corresponding ways."

What Judge Cushman's finding means is that these same "secondary dovetails" and their "corresponding ways" have been utilized in the Double reamers *since* 1902 and have never been abandoned. Otherwise Judge Cushman's statement is shown to be erroneous. The more important part of Judge Cushman's statement follows:

"These added ways caused an outward flare at the mouth of the recess, or pocket. As these ways were made deeper and the flare increased, a wider bearing would be given an opportunity for a wider cutter to bear upon it."

Judge Cushman thus recognizes that the *widened* inthrust bearing on the body and the *widened* inthrust bearing of the cutter utilized by defendant,—for example, in said Type "D" and "F" reamers,—*actually*

ject of the Double patent No. 2. [Patent 748,054, Record pp. 982-987.] The widened inthrust bearing of the cutter is the inner face of the cutter, including the face of the integral "secondary dovetails" 10 [Fig. VI, p. 983], just below the "notch" at the lower end of the cutter shank. This same widened cutter bearing appears in the cutter (numbered 12) of the cuts on page 1099 and cutter (numbered 202) on page 1100 of the record and is formed wider by reason of the "secondary" dovetails there shown. The widened inthrust bearing on the reamer body (against which the inthrust cutter bearing bears) is the face of the integral web at the lower end of the body. This face extends practically clear across the end of the body, as shown best in Fig. III [p. 983]. The showing of this drawing (Fig. III) differs from the cuts of the bodies on pages 1000 and 1100, in this respect, solely and only in that a portion of the metal which lies above and has been undercut to form the secondary or "corresponding" ways (for the secondary dovetails) has been cut away in Types "D" and "F." This is due to a change in the process of machining. As recognized by Judge Cushman "as these ways were made deeper and the flare increased a wider bearing would be give(n)(produced) an(d) opportunity for (a) wider faced cutter to bear upon it." Clearly the width of the bearing on the body and the width of the bearing on the cutter would be made to correspond and these widths would depend solely upon the selection of widths by the designor. This would be mere workshop practice. Increasing in this manner these bearings could not rise

to the dignity of invention. This is the real import of Judge Cushman's quoted statement. But there has in fact been no increase in width of these bearings from the showing of Double patent No. 2 or any increase in the width of the inthrust bearing on the body, in either the "Double Improved" or Types "D," "E" or "F" reamers.

A mere change of form without any change of function or change in mode of action is not invention.

> Walker on Pats. (5th Ed.), Sec. 41, p. 58; J. J. Warner Co. v. Rosenblatt, 80 Fed. 542; National Harrow Co. v. Wescott, 84 Fed. 670; Dalton & Jennings, 93 U. S. 271; Mosler v. Mosler, 127 U. S. 354; Belding v. Challenge Co., 152 U. S. 100.

"Our couclusion is that the absolute length and size of the valve opening was a matter of judgment, in view of the state of the art shown, and that there was no invention in making its length and size greater or less in a reed board of a given width, or when the reed board was made wider or narrower or had more or less sets of reeds in it, either full or partial."

Esty v. Burdett, 109 U. S. 633.

See further:

Benjamin v. Chambers, 59 Fed. 151; Eames v. Worcester, 123 Fed. 67; Harder v. U. S., 160 Fed. 463.

Therefore, it is necessary to find that the elimination of the small pieces of metal. cut away from the extreme outside edges of the web of the body in defendant's reamers, has changed the function of such bearing or made some change in the co-operative relation thereof to the bearing of the cutter. If it be true that either (I) these small pieces of metal have merely been removed and the flat faces produced by their removal are either not used, thus having no function, or (2) have in no manner substantially changed either the function or the mode of operation or interrelation of the body and cutters, then the change is an immaterial one,—a mere workshop expedient.

Defendant *has not* extended the inthrust bearing of any of its cutters so as to bear on the flat face produced by cutting away such small portions of metal. Nor has such removal of metal in any way changed the action of the cutters on the body. This fact has been wholly overlooked by Judge Cushman.

The testimony of Arthur P. Knight, defendant's expert, clearly shows this. The testimony of Mr. Knight will be found commencing at page 542 of the record. His comparison of the showing and device of the Wilson patent with the Double patent No. 1 and Double patent No. 2, and with the mechanical exhibits in the case showing the "Double Improved" and so-called "old style" Double reamers, covers many pages.

On page 554 Mr. Knight refers specifically to what Judge Cushman has determined or referred to as the infringing change,—"entirely sheared away the side web of the extension to form a lug," etc.

Mr. Knight says:

"In regard to this widening out of the bearingface on the inside of the cutters in this improved Double underreamer, I call attention to the fact that this is not widened out to the full width of the underreamer body extension, the cutting away of the remainder of this width being without any useful function or being necessitated or rendered desirable by the exigencies of manufacturing, it being easier to plane this cut right across than to attempt to cut it without removing the extreme end portion." [Record pp. 554-555.]

Mr. Knight thus points out the fact that defendant has not in any manner utilized, as a part of the inthrust bearing on the body, the portions of the flat surface at the end of the body, which have been formed at the extreme edges by the removal of these small particles of metal, inus referred to by Judge Cushman. These extreme potrions form no part of the inthrust bearing and are not utilized in any manner, not even to the extent they were used or utilized in the earlier Double reamers as bracing the cutter against twisting. These portions are entirely idle. They have no function whatever in defendant's reamers. This change was a mere change of form without change of function or of interrelation of the parts. In fact it was a mere incident in the changed manner of machining and has never been used as an operative part or portion of the reamer, either as an extension of the inthrust bearing, or otherwise. Particularly has this change never beer utilized by defendant to transfer the inthrust bearing on the body from a single continuous inthrust bearing at the center of the body and not extending to the edges thereof to a divided, spaced apart, and separated twopart inthrust bearing, the two parts of which are arranged at the extreme edges or sides of the body, as in

the Wilson reamer, when the inthrust bearings are arranged as separated bearings on the surfaces of the separated forks or prongs.

In his opinion after referring to the "secondary dovetails" in the earlier Double devices and to "the corresponding ways in the inner faces of the extension" of the body, and to the fact that these added "ways cause an outward flare at the mouth of the recess" or body, and to the fact that as these ways were made deeper or wider and the flare increased a wider bearing would be given to accommodate a wider bearing upon the cutter body, Judge Cushman says:

"But when defendant departed from this form of construction and *entirely sheared away the side web* of the extension to form a lug, the bearingfaces to accommodate the wider cutter-head, he appropriated the invention and conception of Wilson and particularly of the patent in suit." [Record p. 79.]

We find right here a statement by Judge Cushman of exactly what he found to be the infringement which was to be enjoined. It was not making a wider inthrust bearing on the body for the cutter or a wider inthrust bearing on the body. This, Judge Cushman finds, not only could be, but was, accomplished by the additional dovetails and their corresponding ways of the earlier Double reamers (and of Defendant's Exhibit Double Patent No. 2). On the contrary it was machining off the small particles of metal which, in the earlier Double devices and in the reamer as shown in the drawings of the Double patent No. 2, existed at the extreme sides or outer edges of the end of the reamer body. The presence or the shearing off of these particles of metal is absolutely immaterial to the co-operative relation of the cutters and body in defendant's reamers. Whether present or absent is immaterial in defendant's reamers *but* the separated bearings 9 *must be* arranged at the outer edges of the body and on the separated prongs in the Wilson reamer.

Not only, therefore, is neither claim 9 nor 19 capable of being decreed to cover the feature referred to by Judge Cushman by totally ignoring the terms of the claim, and not only is each of said claims when so revised totally anticipated by the Jones Removable Bowl Reamer and the prior Double reamers with the secondary dovetails and corresponding ways, BUT even if such claims could be *so* sustained as *so* reconstructed, defendant has not infringed either of said reconstructed claims.

As said by the Supreme Court in Duff v. Sterling, 107 U. S. 637:

"The case is one where, in view of the state of the art, the invention must be restricted to the forms shown and described by the patentee. He was not a pioneer; he merely devised a new form to accomplish these results."

Mr. Wilson devised the form of the "shouldered" cutters with their tilting shoulders 16 and inthrust bearings 4³, separated and arranged at the outer edges of the cutter (with the inwardly extended thickened shank between them), in combination with the pronged or forked form of body as a form differing from the forms utilized by defendant under the Double patents.

Mr. Wilson was a mere improver. His invention was not a broad or generic one, and when his application was before the patent office, by amendment to overcome rejections, he inserted in his specification statements of the purposes, objects and advantages of the particular forked formation in combination with the particular "shouldered" cutter formation to differentiate from the very forms of elements used by defendant. He *admitted* that he was merely an improver; that he had simply devised *a new form* to accomplish the particular objects and results specified by him. His contract or patent was made on the basis of these representations.

As said by the Circuit Court of Appeals for the Sixth Circuit in Dowagiac Mfg. Co. v. Superior Co., 115 Fed. 886, at end of page 896:

"Whatever doubt there might have been as to whether the claim was limited to the construction of its language by the specification, it was removed b_V the limitation which he put upon it by his explanation, the consequence of which was the allowance of his patent, and the claim must be read as limited in this respect in the same way as are the other claims."

"A claim must be construed as limited by amendment and acquiesence in the patent office."

Peifer v. Brown, 112 Fed. 435.

And as said by the court in Kelly v. Clow, 89 Fed. 297, a Circuit Court of Appeals case:

"He cannot claim such a construction of his patent as would include what he was expressly required to abandon as a condition of the grant, even if it takes away a material part of his real invention."

And as said by the court in Sutter v. Robinson, 119 U. S. 530:

"Complainant is not now at liberty to insist upon a construction of his patent which will include what he was expressly required to abandon and disavow as a condition of the grant."

And as said by the Supreme Court in Roemer v. Peddie, 132 U. S. 313:

"This court has often held that 'When a patentee, on the rejection of his application, inserts in his specification, in consequence, limitations and restrictions for the purpose of obtaining his patent, he cannot, after he has obtained it, claim that it shall be construed as it would have been construed if such limitations and restrictions were not contained in it."

Judge Cushman has pointed out the change in the mode of operation and function made by the interrelation and coaction of the pronged or forked construction of body and the "shouldered" cutters.

The rule is well settled that-

"Where the mode of operation of the alleged infringement is substantially different from that of the patent in suit, infringement does not exist."

Rule XI, Hopkins on Patents, Sec. 279; Field v. DeComeau, 116 U. S. 187;

Yale Lock Co. v. Sargent, 117 U. S. 373.

"Mode of operation is a criterion of infringement on one side of that question, but not on the other. If the mode of operation of an alleged infringing device is substantially different from that covered by the claim alleged to be infringed, it follows that the charge of infringement must be negatived."

Walker on Patents, 4th Ed., Sec. 341.

"One thing to be the equivalent of another, must perform the same function as that other, If it performs the same function, the fact that it also performs another function is immaterial to any question of infringement. Therefore, it sometimes happens that a junior device is an equivalent of a senior device in a sense that will constitute it an infringement of a patent for the latter, at the same time that the senior device is not an equivalent of the junior device in a sense that will cause the former to negative invention or novelty in the latter. One thing may accordingly be an equivalent of another, though it does more than that other, but it cannot be such an equivalent if it does less."

Walker on Pats. (4th Ed.), Sec. 352.

Judge Cushman refers on page 76, next to the last paragraph, to the fact that in the suit upon the Double patent No. I the Wilson ways for the cutters to slide on, the faces of the prongs and lugs were no more than equivalents of the ways found in the Double invention, which is not determinative in any manner of the question of equivalency in construing the Wilson invention. This is pointed out by Mr. Walker in the text just quoted, and the same rule has been applied by the Circuit Court of Appeals for the Sixth Circuit in Curry v. Union Electric Welding Co., 230 Fed. 422:

"The word 'equivalency' as used in the patent law, is a relative rather than an absolute term. The device of a patent may be the equivalent of that of a prior patent, in such sense as to infringe, while the latter may not be the equivalent of the former, when the second patent is construed as narrowly as it must be."

(230 Fed. 423.)

"It is a natural thought that if device b is the mechanical equivalent of patented device a and so infringes, then, because it is the equivalent of what is old in the art, it cannot be patentable, and the finding that it is patentable implies that it is not an equivalent; but this also fails to observe the relative rather than the absolute meaning of equivalency. Its existence depends on its range or scope, and device b may be the equivalent of a, when the latter is broadly considered, and yet a not be the equivalent of b, when the latter is defined as narrowly as it must be."

(230 Fed. 429.)

Having in mind, therefore, the changes in form made in the reamer body and in the cutters, and the specific change of mode of operation and of specific interrelation of the pronged body and shouldered cutters thus produced by Mr. Wilson as differentiating from the prior Double reamers and from the prior Jones Removable Bowl Reamer, it is clear that defendant has not used in any of its reamers any body which is the equivalent of Wilson's "underreamer body terminating in prongs forming a fork" or any cutter "having two shoulders and a bearing-face on the inner side of each of the two shoulders to engage said prongs" or "mounted between the prongs of said fork," as distinctly specified in claims 9 and 19.

It is equally clear that defendant has in no manner infringed the combination of either claim 9 or 19.

It is equally clear that neither claim 9 nor 19 can be construed as revised by Judge Cushman to omit entirely the forked or pronged formation of body and to omit the "shouldered" cutter construction and to omit the interdependence of these particular forms of this body and cutter.

Upon any view of the decision rendered by Judge Cushman it is found to be erroneous and must be reversed and the District Court directed to dismiss the consolidated suit or to dismiss both suits A-4 and B-62.

Defendant has not in this brief discussed in detail any of the testimony given by the witnesses. Upon defendant's theory of the case this is not necessary. The decree appealed from is shown to be erroneous upon the very findings of fact made by His Honor Judge Cushman. If, however, complainant contests any of the facts found by Judge Cushman and this court desires to review such findings of fact, the defendant will brief the testimony as to these facts in a reply brief.

The form of decree appealed from is erroneous and should be corrected. It adjudges claims 2, 4, 8, 10, 11, 12, 13, 14, 15, 16 and 17 valid but does not grant any relief thereunder. It distinctly adjudges such claims not infringed. This leaves defendant without a remedy for the review of such decree that the claims are valid. The District Court having found these claims not infringed should have simply decreed that "the bill of complaint be dismissed" as to each of these claims. Otherwise injustice may be done defendant in some subsequent matter. Defendant should not be bound by a decree that such claims are valid unless in *some* direct manner some relief is granted under such claims, so *that defendant may have the right to have such decree as to such claims reviewed in this court*. The validity of such claims is not before this court on this appeal. It is submitted that the mandate of this court should direct a correction of the decree in this respect.

If this court can take the view that the amended bill in B-62 was not limited to the Type "F" reamer, then defendant's 5th and 11th assignments of error [Record p. 1116] must be sustained. A party cannot maintain two suits against the same defendant at the same time for the same cause of action. Nor can he divide or split up his cause of action for infringement of a patent and sue the same party (1) on one claim of the patent in one suit and (2) maintain a separate suit upon another claim of the same patent against the same party for the same infringing acts. The cause of action is indivisible. If Judge Bledsoe did not deny defendant's motion (to dismiss suit B-62) on the theory that such suit was limited to the new and subsequent alleged infringement,-Type "F" reamer,-then his decision denying such motion was clearly erroneous and must be reversed and the District Court directed to grant said motion.

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